

### UNIVERSITY OF CALIFORNIA AT LOS ANGELES



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#### SECOND

# ARMAGH CATALOGUE

OF

3300 Stars

FOR

THE EPOCH 1875,

DEDUCED FROM OBSERVATIONS MADE AT THE

## ARMAGH OBSERVATORY

DURING THE YEARS 1859 TO 1883,

UNDER THE DIRECTION OF THE LATE

T. R. ROBINSON, D.D., F.R.S.,

Astronomer of the Observatory,

AND PREPARED FOR PUBLICATION BY HIS SUCCESSOR

J. L. E. DREYER, Ph.D., F.R.A.S

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#### INTRODUCTION.

The Armagh Observatory was founded and endowed in 1791 by Richard Robinson, Lord Rokeby, Archbishop of Armagh, and established under an Act of the Irish Parliament (31st George III. cap. 46). A pamphlet entitled "An Historical Account of the Armagh Observatory," printed in 1883, gives full information of the endowments of the institution, and of the work done to the end of the year 1882.

At first the Observatory possessed very few instruments, the principal one being an Equatoreal by Troughton. the first astronomer, the Rev. J. A. Hamilton, determined the Declinations of 37 Standard Stars, and the results were incorporated in Mr. Pond's celebrated paper in the Phil. Trans. for Otherwise, very little work of any value was done until the Rev. John Thomas Romney Robinson was appointed Astronomer in 1823. A few years afterwards the Primate, Lord John George Beresford, at his own expense enlarged the Observatory and provided a Transit Instrument and a Mural Circle, both by Jones, and a 15-inch Equatoreal Reflector by Thomas Grubb. These instruments were mounted respectively in 1827, 1832 and 1835. From 1828 to 1854 a series of observations was taken with the two former, principally in order to re-determine the positions of Bradley's stars, and the results were given in the work "Places of 5,345 stars observed from 1828 to 1854 at the Armagh Observatory" (Dublin, 1859), commonly known as the Armagh Catalogue.

After the completion of the observations of Bradley's stars, Dr. Robinson formed the plan of re-observing a number of the stars occurring in Baily's Catalogue from Lalande's Histoire Céleste. For this he considered the 3\frac{3}{4}-inch object glasses of the Transit Instrument and the Mural Circle to be too small, while he also recognised the advantage of having both Right Ascension and Declination observed simultaneously with one instrument. The observations had been commenced in 1859, but as Lord John George Beresford with his usual liberality provided the necessary means for altering the Mural Circle, the work was stopped at the end of 1860. The late Mr. Thomas Grubb furnished the instrument with a new telescope of seven inches

aperture, and with two small collimators. These were put up in 1862, and various minor alterations, which will be described further on, were finished early in 1863. In the meantime, an extensive working list of Lalande stars had been prepared, in which a number of stars were included, of which only one coordinate was given in the Armagh Catalogue. Advantage had also been taken of the enforced leisure to compute the constants for reduction to mean place for a great number of these stars for the year 1870.\*

The observations were resumed in April, 1863, but partly because it was soon found necessary to provide a new cell for the object glass, partly owing to the increasing age and failing sight of Dr. Robinson, and the illness of the assistant, Mr. Edmondson (who died in July, 1864), they did not progress very regularly until the Rev. W. H. Rambaut had been appointed Assistant in August, 1864. Since then, they have been regularly continued (except that the anemometer experiments in 1876–80 caused several long interruptions) until the last were made in December, 1883.

Dr. Robinson died on the 28th February, 1882, and a few months afterwards I was appointed his successor and assumed the direction of the Observatory on the 12th June. I was, however, unable to remove to Armagh till the end of August, as repairs had to be made in the dwelling-house. The first object to engage my attention was the mass of unpublished meridian observations accumulated since 1859. Considering that the majority of the stars had in the course of late years been observed in the zones of the Astronomische Gesellschaft, while nearly all of them may be expected to appear in the forthcoming great Catalogue of the Paris Observatory, it seemed very desirable to have the Armagh results published with as little delay as possible. I, therefore, only took a sufficient number of observations to fill a few gaps here and there, and to make myself familiar with the instrument. A selection from the results obtained in the years 1869-76 had been published by Dr. Robinson in 1879, in the Trans. Royal Dublin Society in the form of a catalogue of one thousand stars for 1870. As only a small number of copies of this publication had been procured for distribution, and there were unpublished observations of many of these thousand stars, it seemed desirable to include them all in the proposed new catalogue, so that this

<sup>\*</sup>Whenever it was afterwards found that Baily's places were considerably in error, the constants were re-computed. Reduction tables (similar to Mr. Stone's) prepared by Dr. Robinson many years ago, were employed.

and the catalogue of 1859 would contain a complete record of the meridian work done here since 1827. An application was successfully made to the Government Grant Committee of the Royal Society for the means of printing the Second Armagh Catalogue.

In addition to the results obtained since 1859, the present volume contains a few observations made in the years 1855-58, when the large amount of reductions to be made prevented much observing being done. Up to the end of 1860 the observations were made by Mr. Edmondson (R.A.), and Mr. W. H. Rambaut (N.P.D.), in 1863 by Dr. Robinson, from August, 1864, to July, 1868, by the Rev. W. H. Rambaut, and from November, 1868, to the beginning of 1882 by the Rev. Charles Faris. After September, 1882, most of the observations were made by myself. current reductions were generally made by the respective observers. Great credit is due to Mr. Faris for his perseverance and care in taking the observations during more than thirteen years, and for the energy with which he during this period performed the large amount of reductions incidental to this kind of work. The examination and putting together of the results, the reduction to 1875.0 and formation of the catalogue, as well as the investigation of Proper Motions and of systematic errors have been done by myself.

Having given this short account of how the present catalogue originated, I proceed to describe in detail the instrument and observations.

#### The Instrument and the Method of observing.

The Mural Circle was fully described in Vol. IX. of the Memoirs of the Royal Astronomical Society. Referring for details to this paper and to the Introduction to the Armagh Catalogue, it may be of use to repeat the following particulars here. The circle is 56 inches in diameter and is divided on the inner face to 5′. The divisions are cut in a slip of metal (an alloy of gold and silver). There is a coarse graduation on the edge of the circle for setting. The axis of the circle is 36 inches long and has two pivots, the one next the circle is of 6.5 inches diameter, the other of 2.5 inches diameter, both are three inches long. It rests on Y's with an angle of 60°, attached to a strong cast-iron cradle which can be adjusted in level and azimuth. The axis is hollow and the axis of the telescope passes through it and is secured by a nut. The telescope is clamped to the circle at both ends. Between the circle and the pier a thin disc of copper, of slightly shorter

diameter than the circle, is attached to the axis; it serves for clamping and for revolving the instrument quickly by means of a pinion working in teeth perpendicular to the surface of the disc. The clamps originally furnished by Jones (four in number) act on the edge of the copper disc, they are only used for reflex observations, as a fifth and better one was afterwards provided. This gives fine motion in a somewhat similar manner as is employed in modern transit circles, by the push of a fine screw. The friction wheels are placed between the circle and the copper disc, they are carried by a light framework suspended from a lever on the top of the pier which at the other end carries a heavy counterpoise. The circle can be removed from the pier by taking off the telescope and passing a long iron rod through the hollow axis. This rod is supported on a light but strong carriage of iron which moves on three wheels. About every four or five years the instrument has been taken off the pier and cleaned and oiled. The pivots show evident signs of wear, but I have had no means of testing their figure.

The four original microscopes have been used during the present series of observations, while the use of the additional eight ones has been discontinued.\* They are unusually long (24 inches), and their object-glasses and eye-pieces are separately attached to the pier and only connected by a loose sliding tube. The object of this arrangement, viz, to ensure permanency of the run of the microscope screws, has been fully attained, and the microscopes have been so adjusted as to make it unnecessary to apply any correction for error of run to the mean of the four microscope readings. The setting has always been done on the nearest division line. The spider lines in the microscopes form crosses with an angle of about 40°.

The telescope attached to the circle up to the end of 1860 was of 3\frac{3}{4} inches aperture and 63 inches focus. It has since been attached to a portable equatoreal stand. The object-glass is one of those described in Dr. Robinson's paper on the Melbourne telescope (Phil. Trans. 1869). The new telescope had to be of nearly the same focal length as the old one (it is only five inches longer), but the object-glass has a clear aperture of seven inches and is of very peculiar construction. It consists of four lenses, a crown and a heavy flint cemented together, and a light flint and a crown lens also cemented. The definition and light are very

<sup>\*</sup> The object in attaching them to the instrument is stated in the Armagh Catalogue, pp. xxiv-xxvii. The results found with them seem to throw light on the strange parallaxes found by Brinkley with the great Ramsden Circle at Dunsink.

good. Advantage has, however, not been taken of the large aperture to observe very faint stars, as there is no way of illuminating the wires in a dark field. The bright field illumination is produced by means of a small reflector of 0.4 in. diameter carried by a thin arm attached to the cover of one of the apertures through which the collimators can be pointed to each other. The same gas lamp as formerly is employed and the intensity of the light can be modified by coloured glasses. A diagonal eye-piece is used. There are eleven wires, but only the five central ones have been used, they are about 3°0 distant inter se. There is one fixed and one movable horizontal wire, but the latter has rarely been used. The setting in polar distance was done immediately after the transits over the five wires had been taken, a correction for curvature being applied whenever necessary. As the new telescope was eighty pounds heavier than the old one, the counterpoise lever was lengthened and an additional weight added, so as to keep the centre of gravity in the plane of the friction wheels. Measures were taken to keep the cradle of the axis steady while the circle is turned, and to prevent the clamps from exerting any lateral force which might disturb the azimuth or inclination of the axis. The instrumental adjustments appear to be very permanent

When the instrument was first erected it was noticed in the summer of 1863, that if the object end of the telescope was lowered to the Nadir from the south the "index error" obtained was available south of the zenith (polar distances found with it agreeing with other determinations), but if it was lowered from the north the error was as much as 4" less, but availed north of the zenith. The cause was at once found; in the cold weather the brass cells of the O. G. fitted the lenses tightly, but their expansion in warmer weather gave the lenses play to shift by their own weight. Grubb remedied this by substituting cast-iron cells and supporting the lenses on three equidistant bearings, two fixed at 60° east and west of the meridian, the third movable, and pressed inwards by a spring, whose tension is a little more than the weight of the glass. These changes at once reduced the above mentioned difference from 4" to 0''07 and no trouble has since been experienced from this cause.

The collimation is found by means of two small collimators of 1.06 in aperture and 12 in. focal length, mounted about six feet north and south of the centre of the instrument on cast-iron pillars bolted to isolated piers. The telescope is placed vertical and two small apertures in the centre of it are uncovered, through which the collimators are pointed to each other. The error of collima-

tion is extremely permanent. The collimators have also been used for determining the horizontal flexure of the telescope; in 1864 itwas found by fifteen angles = 0" II. This small value is no doubt due to the shortness and large diameter of the tube as well as to the circumstance that it is clamped at each end to the circle, the framing of which is very strong. No correction for flexure has therefore been applied.

For determining the errors of azimuth and inclination of the axis of the circle, Dr. Robinson adopted a peculiar but simple contrivance. In place of the eye-piece a small draw tube is inserted, containing a double image prism and carrying a small divided circle which reads 90° when the spider lines appear single. When the telescope is directed to the basin of mercury placed below it, both the centre wire and its reflected image are seen double. The prism is now turned until only three images are seen, when the distance between the direct and reflected image is proportional to cosine of the angle through which the prism has been turned. The inclination has been thus determined on every night of observation and the "index error" or Nadir point of the circle at the same time and in the usual manner. Both were very permanent and never subject to sudden variations. When observations were taken on several nights within a week, the mean of the "index errors" thus found has generally been used in preference to the single results.

The error of azimuth has been measured by means of the same apparatus from a meridian mark, 8,000 feet to the north of the Observatory. This consists of an obelisk of cast-iron, the pyramidal summit of which has inside it an adjustable cast-iron plate, with a small opening in the shape of a rhombus. The azimuth has been measured from this mark before sunset, and the azimuth of the mark was from time to time checked by observations of close circumpolar stars. It would doubtless have been better to have discarded the use of this meridian mark altogether, and to have depended solely on transits of circumpolar stars (as was done from September, 1882), but as the instrument appears to have been very steady in azimuth, I do not consider it likely that sensible errors in the results can have been introduced by the use of the meridian mark.

For the registration of the transits Dr. Robinson presented to the Observatory a Chronograph by Knoblich, in all respects similar to the one described in Vol. 49 of the Astron. Nachrichten. The drum is eleven inches long, and four and three quarter inches in diameter, it revolves in two minutes, so that one-eighth of an inch represents a second of time. It is connected by a contact maker of Krille's form, with a clock by Earnshaw.\* It was, however, found that the conical pendulum of its clockwork regulated it very badly, and the chronograph was never used until the end of 1868, when Mr. Howard Grubb had improved it by substituting for the pendulum a governor similar to those he applies to the driving clocks of his equatoreals. The records are made by diamond points on glazed paper, blackened with a kind of Indian ink supplied by Knoblich. The chronograph has been in incessant use since January, 1869, and has always performed well.

The Right Ascensions of the present Catalogue depend on the Standard Stars of the Nautical Almanac, four or five of which were observed on each night. These were not taken in Polar Distance, the Nadir being observed every night. The Latitude adopted is 54° 21′ 12″70. The division errors of the Circle were taken from a table made from Dr. Robinson's investigation many years ago, as described in Vol. IX. of the Memoirs R.A.S.

The Refraction tables used are those of Dr. Robinson, printed on pp. 834-835 of the Armagh Catalogue, the details of their construction being given in the Transactions of the Royal Irish Academy, Vol. XIX. Within the limit of this Catalogue (Zen. Dist. 83°), these refractions may be considered identical with those of the Tabulæ Regiomontanæ. The barometer was the same as formerly used. The Troughton thermometer was in 1859 replaced by a Kew Standard.

#### The Arrangement of the Catalogue.

The places of stars in the present Catalogue have been reduced to the epoch 1875.0. Though the mean epoch of observation is probably a couple of years earlier, 1875 seemed the most suitable epoch, as it will be adopted in the Zone Catalogues of the Astronomische Gesellschaft, and has already been used in several other Catalogues. In reducing to 1875 the Proper Motion was never taken into account.

As the magnitudes had rarely been noted by the observers, I have taken them from the Durchmusterung for all stars north of 92° N.P.D. For southern stars I have generally followed Bessel and Argelander.

The precessions were computed for 1875, with Struve's constant.

<sup>\*</sup>This is not the clock to which Dr. Robinson applied the barometric compensation (Mem. R.A.S. Vol. v., and Armagh Cat., p. xviii.) It has a gridiron pendulum, and its rate is very regular.

In the column "Authorities," will be found references to nearly all modern star catalogues of importance. Owing to the limited space catalogues earlier than 1825 (Bradley, Piazzi, d'Agelet, Groombridge), have been omitted; also the valuable catalogue by Copeland and Börgen of stars in the zone 90°-92°, as all our stars within this zone occur in the Göttingen Catalogue. Of southern Catalogues, only the Cape Catalogues for 1860 and 1880 were searched (that for 1850 was received too late). I trust the references will be found fairly complete, as no pains have been spared to make them so, but it is very probable that some stars may have been overlooked, among sogreat a number.

The following is a list of the abbreviations employed. They are generally the same as Argelander's—

Weisse's first and second Cat.	,		. 1	W	
Argelander, Cat. Aboensis,			. c	$\mathbf{A}$	
Struye's Positiones Mediæ,			. P	M	
Taylor, .				T	
Rumker (the Nachträge with	out nun	ibers),		$\mathbf{R}$	
Armagh Cat.,			. 1	Ar	
Santini o° to + 10° (Mem. R.A.	A.S., X	II.),	. 8	Si, without nun	ıber
Santini o° to – 10°,			. 8	Si, without nun	ıber
Oeltzen's northern and souther	ern Cat.	,	. (	De	
Rümker, Neue Folge,			. ]	R,	
Taylor's Subsid. Cat			. !	T, without nun	$_{1}$ ber
Greenwich, 12 year Cat.			. 12 у	r.	
" 6 year Cat.			. 6 y	r.	
Radcliffe Catalogue, .			. Ř	C	
Bonner Beobachtungen, Bd.	VI.		. E	In without num	$_{1}$ ber
Greenwich, 7 year Cat.			. 7У	r.	
" New 7 year Cat.			N 7 y	r.	
Second Radcliffe Cat.			. R	C,	
Santini 10° to - 12° 30',			. 8	Si <sub>a</sub>	
" -12° 30′ to -15°,			. 8	Si <sub>4</sub>	
" o°to—3°, .			. 8	Si <sub>5</sub>	
Schjellerup,				Sp	
Lamont $+ 3^{\circ}$ to $- 3^{\circ}$ ,			. ]	$\bar{\mathbf{L}_{\mathbf{i}}}$	
", + 3° to + 9°,			]	$\mathbf{L}_{\mathbf{s}}$	
$-3^{\circ} \text{ to } -9^{\circ}$				$\mathbf{L_a}$	
", + 9° to + 15°,				$L_4$	
", $-9$ ° to $-15$ °,				$\mathbf{L}_{s}$	
" n. of +15 and s. of	- 15°	, .	. :	L <sub>6</sub> without nun	aber
Yarnall,				Y	
Cape, 1860, .			. 8	St,	
Greenwich, 9 year Cat.,			. 9У	r.	
Glasgow Cat			. (	Gl	
Stone, 1880,			. 1	St	
Becker, 521 Bradley'sche Ste	rne,			B	

The "Notes" at the end of the volume contain references for which there was no room in the body of the Catalogue, remarks

about Proper Motion, &c. I have added a list of corrigenda in the first Armagh Catalogue, some taken from Dr. Robinson's notes in the Astr. Nachr. Nos. 1421 and 1514, others found in Bonner Beob. Vol. VII. or casually detected by me during the preparation of this volume.

#### The Accuracy of the Results.

The first step towards forming an idea of the accuracy of the observations made with the improved Mural Circle is to compute the probable error of one observation in R.A. and N.P.D. From 400 observations of 80 stars between 30° and 100° N.P.D. this was found to be

$$+ 0^{8} 081$$
 and  $+ 0'' 85$ .

The single errors in R. A. were multiplied with cos S.

Considering the circumstance, that by far the greater part of the Right Ascensions of the present Catalogue were observed with an instrument, which by its maker was only intended for observations of Polar Distances, I thought it desirable to make a complete comparison between this Catalogue and some other extensive modern Catalogue of Stars. For this purpose, the valuable Catalogue of 6,415 Stars observed at the Glasgow Observatory seemed peculiarly suitable, not only because it was deduced from observations made nearly at the same time as the Armagh Observations (1860-81) and depended in R.A. on the same Standard Stars (the Nautical Almanac), but also because it has already been rigorously compared by Professor Auwers with his Fundamental Catalogue (V. J. S. XIX. p. 195). The Glasgow and Armagh Catalogues have 549 stars in common. After leaving out ten stars which differed too much (163, 1107, 1140, 1160, 1210, 1294, 1300, 2186, 2544, 3022, most of which were only observed once here) there remained 519 Right Ascensions and 539 Polar distances. Taking Proper Motion into account wherever it was known, and arranging the differences according to N.P.D. in groups of 10° north of 75° and in groups of 5° south of 75°, the following table of mean difference was formed:-

	GI	ASGOW	-ARMAGH.		
N.P.D.	$\Delta a$ .	Stars.	N.P.D.	$\Delta P.D.$	Stars.
45°1	+08.141	14	44°.9	+0":31	13
55.0	+0.106	7	54.7	-0.32	8
65.0	+0.051	20	64.9	+0.41	21
73.6	+0.051	14	73.4	+0.84	17
77.6	-0.034	121	77.6	-0.51	125
82.5	-0.003	117	82.2	-0.13	120
87.4	-0.050	111	87.4	-0.42	115
92.4	<b> o•o</b> 8o	104	92.2	-0.56	107
97.8	-0.108	11	08.1	- 1.69	13

The stars are not as well distributed in N.P.D. as might have been wished, still the mean differences seem well established, even in the smaller N.P.D.\*. There are no stars north of 39° nor south of 102°. Plotting these mean differences on crossruled paper, and drawing curves through the points, a new table was produced, by means of which the catalogue was reexamined for the detection of periodic errors. Subtracting from each of the original differences the tabular difference for the corresponding N.P.D., I found for the single hours of R.A.:—

			•	
o <sub>p</sub> .2	+0.013	10 St.	<i>−</i> °′′∙06	10 St.
1.7	+0.011	8	+0.45	10
2.2	+0.029	14	+0.16	14
3.3	-0.013	11	+0.12	II
4.6	+0.000	01	-0.66	10
5.2	-0.046	16	+0.10	19
6.7	<b>-</b> o.o8o	15	-0.01	15
7.5	-0.132	13	-0.03	13
8.2	-0.038	2 I	-o.56	21
9.2	+0.005	16	-o.22	17
10.2	+0.050	29	+0.42	29
11.6	+0.062	15	+0.25	16
12.2	+0.008	24	+0.01	26
13.4	-0.014	22	+0.45	24
14'4	0.000	22	+0.55	23
15.4	-0.010	32	+0.00	32
16.2	0.010	33	+0.46	34
17.2	-0'002	22	+0.11	24
18.7	+0.012	20	+0.10	20
19.3	-0.024	28	-0.32	28
20'4	+0.015	37	-0.19	38
21.2	+0.003	35	-0.30	36
22.2	+0.066	<b>3</b> 6	+0:37	38
23.4	+0024	30	0.66	31
				,

Drawing a curve through points representing these values, the following table of  $\Delta a_{\alpha}$  and  $\Delta PD\alpha$  was found. Subtracting again these tabular values from the original differences, arranging the results according to N.P.D. and drawing the curves anew, the table of  $\Delta \alpha_{PD}$  and  $\Delta PD_{PD}$  was found.

Glasgow	minus Sec.	Armagn	Cat.
	$\Delta \alpha_{PD}$		$\Delta PD_{PD}$
4 = 0	-1 -51 - 4 -	_	0"*T 2

45°	+o*·145	o"·13
50	+0.110	-0.11
55	+0.080	0.00
60	+0.02	+0.50
65	+0.030	+0.35
70	+0.010	+0.40
7.5	-0.008	+0.18
80	-0.016	- O*2 I
85	-0.025	-0.30
90	0.048	-0.40
95	-0.092	-0.92
100	0°165	1.75

	$\Delta \alpha_{\alpha}$ .	$\Delta \mathrm{PD}_{lpha}.$		$\Delta \alpha_{\alpha}$ .	$\Delta \mathrm{PD}_{a}$ .
O <sub>p</sub> .O	+0"023	+o"·25	I 2h 'O	+0".040	+o":38
I	+0.016	0+.35	13	+0.000	+0.30
2	+0.051	0+.38	14	-0.010	+0.53
3	+0.016	0+12	15	0.015	+0.55
4	-0.010	_0·12	16	-0.011	+0.54
5	-0.040	-0.10	17	-0.010	+0.59
6	-0.073	+0.02	18	<b>~o.</b> oo8	+0.14
7	-0.102	0.00	19	-0.004	-0.07
8	-0.072	-0.12	20	0.000	-0.56
9	-0.022	-0.40	2 I	+0.008	-0.55
10	+0.013	-0.12	22	+0.022	-0.03
II	+0.042	+0.56	23	+0.038	+0'12

The Polar Distances of the two Catalogues are quite independent of each other, in both cases being referred to the Nadir. The Right Ascensions of both Catalogues depend on the Nautical Almanac, but during the period embraced by the Armagh observations, the N. A. system of star places has been twice changed, in 1871 and in 1880. The Glasgow RAs agree closely with the system used from 1871 to 1879 (seven year Cat.) and are not affected by the change of system in 1880, while the Armagh RAs, though the majority depend on the system 1871-79, are also much influenced by the systems used before 1871 and from 1880 It was therefore a priori not to be expected that they should show no sensible deviation from the Glasgow RAs, but it is very remarkable that it is chiefly in the hours observed in mid-winter (6h-8h) that the differences reach a large quantity. It was found by Dr. Gill, (Mem. R.A.S. XLVI, p. 80) that for observations made with the chronograph the Right Ascensions of faint stars are too great, while for eye and ear observations (as those made in Glasgow were) no such error appears, and it is at least conceivable that in cold weather an observer might take longer time to press the key than he would require in warmer weather. Another possible cause of error is, that the meridian mark, by which the azimuth of the Armagh instrument has been determined, is situated to the north of the Observatory, in the open country, without any dwelling-houses intervening with hot air, while the great number of chimneys to the south-west and partly to the south of the Observatory owing to the prevailing westerly winds must produce something like lateral refraction, which of course must reach a maximum on winter evenings when the chimneys are hardest at work. Possibly the azimuth found by looking northwards was therefore not strictly applicable south of the zenith, and an error might have been introduced in this way.

With regard to the terms of  $\Delta a$  depending on N.P.D., their change of sign and rapid increase with the declination seem to

me likely to arise from defects in the pivots or in the collimation which would naturally show themselves in this way, as the mean N.P.D. of the Standard Stars employed (75°), falls very near the place where the change of sign occurs. It should be remembered that the collimation can only be determined with the telescope horizontal, and the inclination with the telescope vertical, and if we add to this the non-reversible and one-sided form of the instrument we have plenty of possible causes by which to explain the errors depending on N.P.D.

Combining the above tables with those deduced by Professor Auwers for the Glasgow Catalogue we get:—

Reduction of Second Armagh Catalogue to Auwers' Fundamental System:

		$\Delta a_{ extbf{PD}}$		$\Delta \mathrm{PD}_{\mathrm{PD}}$	
	45°	- <b>0</b> 8'179		+0".45	
	50	+0.131		+0.58	
	55	+0.084		+0.00	
	60	-0.041		+0.08	
	65	+0.014		+0.12	
	70	-0.004		+0.32	
	75	+0.003		+0.51	
	80	+0.011		-0.14	
	85	+0.018		-0.53	
	90	+0.014		-0.13	
	95	-0.010		-0.25	
	100	-0.049		-0.23	
	$\Delta a_{\alpha}$	$\Delta \mathrm{PD}_{\alpha}$		$\Delta \alpha_{\alpha}$	$\Delta \mathrm{PD}_{lpha}$
O <sub>p</sub> .O	+05.040	+0":49	12h.0	+os.030	+0″•01
1	+0.031	+0·58	13	0.000	-0.10
2	+0.033	+0.24	14	-0.012	-0.18
3	+0'021	+0.27	15	-0.013	-0.18
4	-0.013	-0.04	16	0.004	0.10
5	-0.052	-0.09	17	+0.004	-0'02
6	-o <sup>0</sup> 89	-0.01	18	+0.010	-0.03
7	-0'121	-0.13	19	+0.019	-0.19
8	-0.088	-0.33	20	+0.050	-0.5
9	-0.034	-0.64	2 I	+0.058	-0.13
10	+0.004	-0.44	22	+0.046	+0.14
11	+0.032	-0.04	23	+0.026	+0.33

The Polar Distances appear on the whole to be much more satisfactory than the Right Ascensions.

With the completion of this Catalogue the meridian observations, which hitherto have formed the principal astronomical work at the Armagh Observatory, have been discontinued, at least for the present. In response to an application from the Governors to grant some compensation to the Observatory for the various losses it had sustained through recent legislation, Her Majesty's Government two years ago made a grant to the institution of £2,000. Part of this sum was expended on an Equatoreal Refractor of 10 inches aperture by Mr. Grubb, and so long as only the present antiquated meridian instruments are available, the activity of the Observatory will be directed to work with the new instrument only. The observations on which this publication is founded have been made at a time when every successive step of reform legislation in Ireland has had the effect of diminishing the resources of the Observatory, and whatever be the shortcomings of the work, I trust it will show that the devotion to science which (to use an expression of Dr. Robinson's) has raised the Observatory to "rank among the best national institutions, without costing the nation one penny," has remained unabated notwithstanding the troubles of the times.

J. L. E. DREYER.

Armagh Observatory, April 27, 1886.



# THE SECOND

## ARMAGH CATALOGUE

OF STARS,

FOR THE EPOCH 1875.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Precess.
1 2 3 4 5	47264 47280 47287 47289 47307	7·2 6·0 6·9 7·6 7·7	oh om 9°98 o o 54'9; o i 8'92 o i 9'2! o i 24'i	64·79 78·03 64·75	3 1 5 1	+3**•73 3*•71 3*•76 3*•81 3*•78
6 7 8 9	47318 47347 47352 47374 47384	6·0 7·0 8·0 8·0 7·3	0 I 54.2 0 2 33.6 0 2 47.9 0 3 30.9 0 3 38.9	73.73 77.79 82.88	1 2 1 1 5	3.070 3.080 3.071 3.082
11 12 13 14 15	10 19 32 55	6·7 7·3 6·5 var. 7·7	0 3 57°10 0 4 4°90 0 4 18°70 0 4 45°60 0 5 23°50	70·87 79·83 73·58	4 4 3 4 5	3.104 3.086 3.069 3.088
16 17 18 19 20	68 73 - 123 141 179	7.7 5.0 6.5 6.5 7.0	0 5 42.79 0 5 47.51 0 6 56.11 0 7 32.8 0 8 26.82	81·30 74·94 70·85	5 2 1 1	3.061 3.061 3.061 3.061
21 22 23 24 25	174 193 247 221 220	7·6 8·0 6·0 7·1 7·8	0 8 28·90 0 8 52·00 0 9 48·00 0 10 11·73 0 10 12·13	71.84 78.87 77.79	1 4 1 1 5	3°135 3°099 3°115 3°115
26 27 28 29 30	226 230 234 235 251	6·5 6·8 7·0 6·5 7·7	0 10 18·6; 0 10 19·7; 0 10 21·6; 0 10 26·3; 0 11 1·1:	75°34 64°79 75°23	4 5 1 5	3°141 3°082 3°049 3°098 3°118
31 32 33 34 35	259 273 276 3°5 313	6·8 7·0 7·3 7·0 7·3	0 11 23.0 0 11 33.2 0 11 54.4 0 12 9.8 0 12 52.1	69.85 65.75 82.86	5 1 1 1 4	3.108 3.061 3.138 3.085
36 37 38 39 40	3 <sup>1</sup> 7 345 354 3 <sup>6</sup> 7 373	7·7 7·0 6·4 6·0 7·5	0 12 54.7 0 13 44.8 0 13 52.5 0 14 13.4 0 14 21.1	71.85 78.86 76.14	2 4 2 6 4	3.099 3.109 3.114 3.099
41 42 43 44 45	37 <sup>2</sup> 383 405 413 419	7.0 7.1 6.5 6.8 7.5	0 14 21·5 0 14 36·0 0 15 26·3 0 15 49·5 0 16 16·8	74.50 64.79 78.88	2 3 1 2 5	3.125 3.132 3.040 3.136 +3.122

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1 2 3 4 5	62° 8′ 31″′·7 108 5 3′1 59 1 35′1 37 55 25′5 51 58 21′6	72.01 59.97 78.03 59.88 69.87	5 1 5 1 2	- 20".05 20.05 20.05 20.05 20.05	W 1305. Oe 23248. W 1335. W 1351.
6 7 8 9	99 31 9°0 62 26 53·8 65 24 31·5 93 15 23·9 65 29 53·5	64.76 73.73 72.30 82.88 75.00	I 2 2 I	20°05 20°05 20°05 20°05 20°05	W 1249, Si <sub>2</sub> , 6yr 3, 7 yr 2. W 11, Ar7. W 23, Si <sub>2</sub> , N7yr5, L <sub>2</sub> 6, W 29. [Gl 19.
11 12 13 14	33 31 49.5 57 33 53.5 103 16 27.5 94 1 0.9 62 16 24.6	72·56 70·87 79·83 73·62 76·34	4 4 3 5 6	20.05 20.05 20.05 20.05 20.05	Oe 46, Bn. W 44. W 46, Si <sub>4</sub> 4. T 14, Si <sub>2</sub> , L <sub>3</sub> 7.
16 17 18 19 20	50 47 38.0 108 38 1.5 63 42 23.8 57 29 19.2 104 52 16.5	72.98 81.30 70.35 69.30 73.78	5 2 1 2	20.05 20.04 20.04 20.04	W 104. Oe 47, Y 54. W 181. W 117, Bn.
21 22 23 24 25	38 3 20·3 62 6 16·2 47 5 57·6 54 3 50·1 54 12 19·7	68·51 71·84 78·87 73·90 71·84	3 4 1 2 5	20°04 20°04 20°03 20°03	W 232, RC 44. Y. 103. W 245, Y 104.
26 27 28 29 30	41 13 58·1 80 27 1·5 110 54 16·9 67 26 17·8 54 8 37·0	73.80 75.42 64.79 75.23 82.79	4 4 1 5	20°03 20°03 20°03 20°03 20°03	R 28. W 151, Si <sub>2</sub> , Gl 59. Bn. W 253, L <sub>6</sub> . W 266, Y 113.
31 32 33 34 35	70 28 5°1 44 28 46°9 92 42 36°5 98 44 35°7 64 14 23°2	72·34 67·78 65·75 82·86 72·18	4 3 1 3	20.03 20.03 20.03 20.03	W 277, $R_{12}6$ . Oe 187. $[L_{13}6, Gl 72.$ W 181, $T 51$ , $En$ , $Si_{5} 16$ , W 185, $Si_{2}$ . W 309, $T 57$ , $R 40$ , $R_{1}$
36 37 38 39 40	70 41 39°2 66 1 42°0 59 45 30°7 57 46 57°3 72 12 46°0	71.93 72.24 78.86 74.72 75.13	5 2 5 4	20°02 20°02 20°02 20°02 20°02	W 311. W 328. W 331, R <sub>2</sub> 54. W 349, R 53, Bn.
41 42 43 44 45	57 42 47'4 54 48 52'4 110 45 8'0 55 9 25'2 61 14 20'3	78·14 73·33 64·79 78·89 74·06	3 4 1 2	20'02 20'01 20'01 	W 348. W 357, Y 145. Oe 136, Bn.

No.	Lalande.	Mag.	Mean R.	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
46 47	42 I 42 7	7°0	0 I	6 <sup>m</sup> 213.69	64·76 82·87	I 2	+ 3**146
48	441	7.9	0 1		72'34	4	3.120
49	437	7.5	0 1	7 4.91	76.17	3	3.247
50	484	7.5	0 1	8 23.74	72.97	5	3.186
51	495	7.0	0 1	_ 0			3.032
52	499	7.0	0 1		76.07	5	3.146
53	504	7.4 7.0	0 1		74.59 82.83	4 2	3.191
54 55	552 549	7.2	0 2	J	80.02	4	3,120
56	558	7'1	0 2	0 27.72	71.07	5	3,511
57	566	6.2	0 2		71.67	6	3.126
58	567	7.8	0 2	0 33.			3.145
59	585	6.0	0 2		64.79	I	3.013
60	583	8.0	0 2	0 58.95	82.87	I	3.025
61	589	7.9	0 2		7 <b>0</b> ·80	2	3.136
62	599 609	7.0 8.1	0 2	,		_	3.052
63		8.0	0 2	.0, ,	75 <sup>.</sup> 94	I	3.138
64 65	607 613	7.0	0 2		74.67	4	3·155
			0 2	1 51.47		5	3 133
66	614	6.7	0 2		78.87	1	3.121
67	641	7.6	0 2		74'40	2	3.143
68	645	7.5	0 2				3,135
69	655	6.0	0 2		65.73	I	3,301
70	673	7.9	0 2	3 52.86	79'79	2	3.122
71	686	7.8	0 2	4 3.35	77.80	1	3.128
72	683	6.8	0 2		71.13	4	3.521
73	690	7.3	0 2.		71.17	3	3.194
74	727	7.3	0 2.		74.91	3	3.156
75	742	8.1	0 2	5 . 19.74	70.35	2	3.118
76	747	6.2	0 2	35.10	76.06	4	3'173
77	761	6.8	0 2		71.45	5	3.149
78	766	7.5	0 2		77.18	3	3.132
79	765	6.2	0 2		78.85	I	3.583
80	776	7.1	0 2	25.29	80.82	2	3.114
81	788	7.2	0 2	6 47.56	74.64	4	3.200
82	816	8.2	0 2	7 24.92	65.80	1	3 124
83	849	6.6	0 2		71.62	5	3.192
84	852	7.5	0 2		72.07	5	3.501
85	865	6.2	0 2	8 48.96	82.87	I	3 060
86	838	7:7	0 2	17 01	75.48	2	3.189
87	880	5.8	0 2		71.85	I	3.060
88	887	7.6	0 2		78.16	3	3.151
89 90	884 892	7°2	0 2		74.01	5	3.505
90	092	0.5	0 2	26.34	74.67	4	+3.110

No.	Mean N.P D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
46	51° 56′ 25″ 4	59.89	2	- 20".00	Y 161.
47	102 54 20'1	82.87	2	20.00	See Notes.
48	48 38 11.6	72.34	4	20.00	W 407.
49	29 43 44.8	76.17	3 6	20.00	Oe 291.
50	42 38 45.5	73'39	6	19.99	
51	109 9 43.0	64.74	1	19.99	Oe 168.
52	55 39 19 3	76.07	5	19,99	00 1000
53	50 51 44.7	74'44	5	19.99	
54	109 23 11'4	82.83	2	19.99	Oe 185.
55	56 30 30.7	80.07	4	19.99	FD 01 4 4 37
					[RC 98, 7yr 26, Y 199.
56	40 42 23.5	71.07	5	19.98	PM 25, Oe 362, R, 122,
57	65 39 00	73.05	5	19.98	T 91.
58	59 30 55.6	64.84	1	19.98	W 494.
59 60	99 20 57'2	64.79	I	19.97	Oe 196, Y 202, St 158. W 331, R, 132.
00	99 20 57.2	82.87	1	19.97	W 331, 16g 132.
61	62 30 4.7	67.86	2	19'97	
62	110 49 35.3	65.85	I	19.97	Oe 202, Bn, Y 206.
63	62 37 54.1	70.08	2	19.97	W 525.
64	42 57 56.2	71.80	4	19.96	W 525. Oe 380.
65	56 53 31.4	74.23	6	19.96	W 527.
	.0				
66	58 15 14.7	78.87	I	19.96	
67 68	61 51 51.6	70.20	4	19.95	W D
69	65 48 28.3	67.76	I	19.95	W 554, R <sub>2</sub> 155.
70	30 42 50°2 58 30 50°3	65.73	1 2	19.95	
10	30 30 30 3	79.79	-	19.95	
71	58 33 16.4	77.80	I	19.95	W 581.
72	34 59 8.8	71.05	5	19.94	
73	49 10 7.6	73.76	2	19.94	W 584.
74	69 51 40.6	74'91	3	19.94	W 609, R. 180.
75	72 34 55'9	69.63	4	19.93	W 621, Ar 87.
76	FF 47 44.9			70100	
70	55 41 44.8	75.64	5	10.03	
78	67 29 52.6	77.18	5 3	19.93	Rg 202, L6.
79	35 47 37.8	69.39	2	19.92	R <sub>2</sub> 203.
86	74 31 26.4	80.84	2	19.92	W 648, R 125, R2 205,
0.					[Gl 147.
81	50 35 4.1	74.64	4	19.92	W 656.
82 83	71 54 3.2	65.80	I	10.01	W 676. W 699, PM 38, Y 264.
84	53 51 25.1	71.83	4	10.00	RC 147.
85	94 16 54.1	82.87	5 3	19 90	See Notes.
86	55 1 48.6	750		10,00	R 138, Y 267.
87		75.48	2 I	10.80	See Notes.
88	91 11 34.1	71.85	3	19.89	W 723, R 142.
89	52 26 11.3	74.01	5	19.89	Y 274.
90	77 28 34'2	74.67	4	-19.89	See Notes.
		1	'		

No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch	Obs.	Ann. Prec.
91 92 93 94 95	911 930 960 983 1014	7.0 6.5 6.5 6.5 7.7	oh 29 <sup>m</sup> 46*·o1 o 30 41'45 o 31 41'64 o 32 20'63 o 33 7'12	80·83 75·53 71·35 73·08 64·79	2 3 2 5 1	+3°024 3'220 3'380 3'162 3'311
96 97 98 99 100	1019 1045 1080 1100	7.7 7.0 8.2 7.0 7.2	0 33 20°17 6 33 58°60 0 34 46°49 0 35 30°81 0 35 49°87	73°44 76°01 76°51 70°45 72°59	3 4 3 5 4	3 <sup>2</sup> 77 3 <sup>2</sup> 35 3 <sup>1</sup> 77 3 <sup>2</sup> 66 3 <sup>1</sup> 78
101 102 103 104 105	1125 1137 1147 1165 1202	7.3 7.0 7.5 8.1 8.5	o 36 20.58 o 36 32.05 o 37 19.14 o 37 34.36 o 38 55.60	78·14 70·41 74·78 74·16 70·61	4 4 2 3 5	3°133 3°032 3°365 3°140 3°195
106 107 108 109 110	1210 1236 1240 1250 1244	6·5 7·5 5·0 7·8 7·0	0 39 26·16 0 39 55·30 0 40 0·40 0 40 30·14 0 40 39·09	73'12 73'79 78'52 75'40 64'88	4 3 5 6 1	3.451 3.308 3.133 3.259 3.565
111 112 113 114 115	1272 1305 1308 1322 1320	7.5 5.5 7.5 6.8 7.5	0 40 59'28 0 41 49'84 0 42 10'00 0 42 31'67 0 42 37'37	73.07 70.83 76.26 64.84 72.11	4 3 3 1	3°151 2°972 3°152 3°135 3°306
116 117 118 119	1348 1336 1361 1357 1370	7.0 7.7 7.0 7.6 7.4	o 43 4.08 o 43 11.66 o 43 30.86 o 43 32.80 o 43 58.30	65.83 75.27 80.85 71.51 76.07	1 5 1 3 5	2.957 3.243 3.068 3.205 3.191
121 122 123 124 125	1395 1405 1406 1414 1438	7'3 8'0 7'0 7'0 7'5	0 44 35.72 0 44 47.84 0 44 58.71 0 45 9.58 0 45 49.76	73.54 82.85 74.98 70.66 73.91	3 2 1 5 3	3°294 3°046 3°177 3°243 3°173
126 127 128 129 130	1443 1451 1462 1479 1494	6·7 7·8 7·3 7·6 7·0	o 46 0°24 o 46 18° o 46 39°19 o 46 51°73 o 47 18°28	75 <sup>.8</sup> 4 70 <sup>.</sup> 66 77 <sup>.</sup> 36 77 <sup>.</sup> 19	1 4 6 3	3.281 3.349 3.322 3.218 3.199
131 132 133 134 135	1495 1540 1539 1544 1585	7'3 6'8 7'8 7'5 8'3	o 47 22°20 o 48 33°37 o 48 36°41 o 48 40°38 o 49 55°70	69.33 78.84 70.85 73.39 73.48	4 5 4 5	3°245 3°197 3°234 3°221 +3°227

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
91 92 93	105° 39′ 36″·1 50 21 20·8 30 51 41·5	80·83 75·53 70·36	2 3 4	- 19"·89 19·88 19·87	Bn. W 761.
94 95	64 21 48·5 38 48	73.08	5	19.86	W 812.
96 97	43 25 51°1 50 28 31°8	77·78 70·67	2 6	19 <sup>.</sup> 84	W 859.
98 99 100	62 38 37.8 46 44 52.5 63 2 35.1	76.21 70.36 72.29	3 4 4	19.81 19.82	W 878. W 901.
101	74 1 14'1	78·14 70·41	4	10.80	W 931, R 162. W 1137, Si <sub>2</sub> , Si <sub>3</sub> 48.
103	36 31 57.9 72 45 18.3	74.18	4 2 3	19.79	RC 193. W 963.
105	31 6 33·3	70.26	4	19.77	W 988. R, 279.
107	44 19 9·1 75 12 24·7	72.27 78.22	4 4 5 6	19.75	Oe 728, R <sub>2</sub> 286. [Gl 206. T. 222, Ar 158, R <sub>2</sub> 288, N 7yr 87,
110	51 39 12 <sup>8</sup>	75.40 59.89	6	19.75	W 1023, R <sub>2</sub> 296. Oe 741.
111	71 46 55.4	73.07 68.82	4 3	19.74	W 1034, R <sub>2</sub> 305, Bn, Oe 425, Y 400, St 315.
113	71 59 42.6 75 52 24.1 46 37 14.3	76·26 64·84 68·87	3 1 4	19.41 19.41	W 719, R <sub>2</sub> 322, Sp 282. R 194.
116	114 49 1.1	65.83	5	19.70	Oe 440, Bn, Y 414, St [322.
118 119 120	90 54 20'4 62 18 40'4 65 5 46'3	79·90 70·47 76·07	5 5	10.60 10.60	W 732, Si <sub>5</sub> 62, L <sub>1</sub> 143, W 1095. [Y 424, Gl 219. W 1119.
121 122 123	49 26 56·2 95 43 2·2 68 3 26·7	74.06 82.85 71.40	5 2 2	19.68 19.67 19.67	W 1126. W 759. R <sub>2</sub> 346.
124	56 47 23.0	73.91	4 3	19.65	W 1137. W 1155, R, 356.
126 127 128	52 7 49.5 44 5 4.5 47 18 41.6	71.80 64.76 70.66	2 1 4	19.65 19.64	R <sub>2</sub> 360, Y 441. Bn. R 212.
129	61 35 56.5	77.07	5 4	19.63	W 1178. W 1192.
131	57 47 24.4 66 7 13.0 60 1 0.6	70°32 78°84	4	19.63 19.60	Bn. W 1218, R <sub>2</sub> 397. W 1221.
133 134 135	62 7 1·6 61 52 44·3	70.47 73.39 73.48	5 4 5	19.28	W 1223. W 1256.

No.	Lalande.	Mag.	Mean R.A. 18	375.0.	Epoch.	Obs.	Ann. Prec.
136 137 138 139 140	1611 1625 1633 1629 1671	7'9 7'9 8'3 6'8 6'0	0 51 1	3'99 5'95 3'49 0'97	77.87 71.84 64.94 77.14 79.56	3 4 1 4 3	+ 3°·216 3'273 3'235 3'310 3'141
141 142 143 144 145	1663 1665 1681 1677 1689	6·8 7·2 7·0 7·3 7·0	0 52 I 0 52 2 0 52 4	6.99 7.87 5.88 2.73 4.75	70.95 71.87 67.85 73.29 77.52	6 5 1 5 3	3°259 3°226 3°037 3°261 3°405
146 147 148 149 150	1701 1727 1749 1770 1791	7.0 6.2 6.9 8.0 6.5	0 54 I 0 55 0 55 I	7.16 4.58 2.69 1.38 8.60	76·92 73·61 71·84 70·85 77·17	2 4 4 1 3	3'399 3'431 3'455 3'123 3'236
151 152 153 154 155	1834 1847 1854 1879 1870	7'2 6'5 6'5 7'3 7'0	0 57 3 0 57 3 0 58 1	3.70 4.68 7.82 7.86 9.41	80·85 73·55 70·86 75·64 68·89	2 3 5 4 1	3.301 3.342 3.256 3.082 3.593
156 157 158 159 160	1882 1895 1912 1924 1943	7'3 7'0 7'5 7'5 7'5	0 58 4 0 59 5 1 0 1	2.91 2.95 1.80 2.96 6.98	78·87 65·83 71·80 74·03 70·86	1 4 6 5	3·192 2·940 3·309 3·394 3·432
161 162 163 164 165	1965 1977 1992 1997 2007	8.0 8.5 7.0 7.2 7.0	I I 2 I I 3 I I 5	7.90 7.05 3.05 6.94 7.44	77·56 64·94 82·90 75·34 75·86	3 1 2 4 1	3°057 3°274 3°080 3°276 3°307
166 167 168 169 170	2047 2087 2096 2110	6·8 7·5 8·6 7·3 6·6	I 3 I 4 I 5	4.27 7.94 o. 9.70 4.26	78·95 64·79 80·45 69·68	2 1 2 5	3 <sup>227</sup> 3 <sup>380</sup> 3 <sup>084</sup> 3 <sup>390</sup> 3 <sup>750</sup>
171 172 173 174 175	2132 2144 2157 2191 2231	8.0 7.3 7.3 7.5 6.8	I 5 5 1 6 2 I 7 2	33.56 57.71 26.14 26.58	70.66 74.03 77.66 76.53 70.88	5 5 5 3 2	3.321 3.303 3.398 3.295 3.214
176 177 178 179 180	2247 2244 2280 2283 2293	7°1 7°0 6·8 6·9 6·8	I 10 I 10 I I 10 2	9°27 5°73 10°61 23°13 27°92	72·82 73·42 78·85 75·86 71·08	2 2 1 4 4	3.216 3.220 3.397 3.526 + 3.316

No.	Mean N.P.D1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
136 137 138 139 140	63° 40′ 39″·7 55 41 22·1 61 9 8·9 51 12 0·6 76 58 48·8	77.87 71.84 64.95 76.70 79.56	3 4 1 5 3	- 19".57 19:56 19:56 19:55	W 1266, T <sub>3</sub> , R <sub>2</sub> 418, N 7yr [109, Y 488 W 1284, Bn. W 1285, Y 494. W 873, R <sub>2</sub> 428, Y 496.
141 142 143 144 145	58 13 12·1 63 1 8·6 96 33 21·2 58 10 53·7 43 21 21·5	70.61 71.87 67.85 78.87 77.52	5 5 1 3	19.54 19.53 19.53	W 1315. W 1316. W 890, Si <sub>2</sub> , Sp 340. W 1326.
146 147 148 149 150	43 21 15.0 41 7 47.2 39 38 17.5 80 55 44.2 62 55 32.3	76·92 .73·61 71·84 65·20 77·17	2 4 4 3 3	19*51 19:48 19:48 19:46	Oe 988. W 944, Gl 254. W 1389, R <sub>2</sub> 477.
151 152 153 154 155	55 12 9.8 50 40 46.8 61 0 31.3 88 21 23.4 32 54 51.4	80·85 73·91 70·88 75·64 68·89	2 4 4 4 1	19.40 19.43 19.43	W 1426, R 249, 12yr69. R 250, T <sub>3</sub> , Ar 221, Gl 260. W 1002, N7yr 125, Sp 362, Y 553 Oe 1073, RC 326.
156 157 158 159 160	71 28 22'3 111 24 12'6 55 31 26'2 47 8 42'4 43 49 35'6	73'33 65'83 71'80 74'02 70'88	2 1 4 6 4	19.40 19.40 19.40	W 1449. Oe 610. W 1478. W 1485. Oe 1117.
161 162 163 164 165	92 24 6.0 60 14 16.3 88 39 45.0 60 15 35.5 56 43 32.5	77.56 64.94 82.86 75.34 69.81	3 1 4 3	19°35 19°34 19°33 19°32	W 1057, PM 87, Si, 97. W 1511. See Notes. W 1527. W 1531.
166 167 168 169	66 52 22°1 49 44 88 6 42°1 49 45 10°0 28 57 29°5	78·95 67·80 77·95 67·22	2 1 6	19.30 19.30 19.30	L <sub>e</sub> , W 7. W 25. W 55. Oe 1212.
171 172 173 174 175	56 32 39.9 58 35 20.4 49 30 46.0 60 7 12.7 70 14 46.9	70.63 74.03 75.52 74.90 68.84	4 5 6 4 4	19.16 19.50 19.53 19.53	PM 94, Bn, Gl 288. W 77. W 128.
176 177 178 179 180	70 9 31·2 69 36 22·7 51 10 48·5 41 39 3·2 58 54 56·1	72·82 73·42 72·25 75·86 71·09	2 2 2 4 5	10.11 10.15 10.15 10.15	W 136. W 166, T 408. W 162, R, Y 635. PM 102, Oe 1334. W 175.

No.	Lalande.	Mag.	Mean R	. A.	1875-0.	Epoch.	Obs.	Ann. Prec.
181	2331	8.0	Ih 1	I m	39*.96	64.93	ı	+ 3*.340
182	2330	6.2		I	42.10	68.85	3	3.378
183	2352	8.0		2	37.98	73.77	I	3.455
184	2408	7.0	)	13	48.	13 11		2.993
185				_			2	3.461
105	2396	7.5	I	13	50'71	75.82	2	3 401
186	2403	6.2	- I :	14	21.89	71.37	4	3.240
187	2423	7.0	1 1	14	28.14	76.10	4	3.242
188	2443	7.5	1 1	14	48.			2.866
189	2466	6.7	1 1	ι6	11.06	70.85	1	3.384
190	2483	7.0	1 1	6	17.			3.124
191	2507	7.8	· 1 :	17	32.43	73.84	I	3.239
192	2539	7.0		•		77.87	I	3.004
				17	45.44		1	
193	2530	7.3 6.	1		14'27	69.47	3	3.243
194	2581		1	18	32'10	71.90	2	2.041
195	2591	6.8	I	19	23.49	78.40	2	3.120
196	2597	6.8	1	19	49.46	74.32	5	3.302
197	2620	8.3		20	30.13	73.84	I	3.333
198	2654	7.5	1	2 I	10.51	75'37	2	3.332
199	2637	6.8	1	2 I	20.67		3	3.647
200	2675					75.87	3	
200	2075	7.0	I :	2 I	32.84	72.06	1	2.977
201	2690	7.0	1	22	0*49	64.95	1	2.021
202	2673	7.4	I	22	3'14	75.85	1	3.413
203	2710	6.2	1	22	51'44	74.07	4	3.562
204	2740	7.0	1	23	31.82	73'92	3	2.955
205	2762	6.6	1	25	0.19	76.27	5	3.399
206	2757	6.2	1	25	19.69	71.85	2	3.840
207	2777	6.2	1	25	38.19	78.85	1	3'413
208	2789	7.0		26	14'	1003	1	3.489
209	2814	7.2	1	26	•	72.28	5	3.417
210	2847		1		44.29			
210	2047	7.3	1	27	52.30	76.27	5	3.390
2 I I	2859	8.0	1	28	0.84	78.89	4	3.520
2 I 2	2867	6.8	I	28	30.41	76.58	5	3.201
213	2890	6.2	I	28	43'12	73.92	3	3.403
214	2918	8.0	1	29	23.29	74.83	2	3.326
215	2950	7.3	1	30	31.99	72.11	4	3.301
216	2969	8.0	1	31	6.24	76.87	3	3.267
217	2999	6.5	ı	31	23.02	82.86	I	2.980
218	3002	6.5	ī	31	46.81	79:30	5	3.270
219	3014	7.2	I	32	14.2	77.27	5	3.340
220	3032	8.5	1	32	21'10	64.94	1	2.917
007	2006				2216 :	# X 100		21200
221	2996	7.5	I	32	33.64	71.90	4	3.500
222	3062	7.2	I	33	43.31	69.30	2	3.004
223	3091	8.0	1	34	25.77	78.86	2	3.041
224	3073	7.5	I	34	34.15	73.78	I	3.272
225	3112	7.0	I	35	44.46	74'13	4	+ 3.727

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
181 182 183 184 185	56° 54′ 5″·4 53 16 21·5 47 26 53·6 100 32 18·2 47 25 23·1	64.79 68.85 73.77 59.97 72.13	3 1 1 3	-19":08 19:08 19:06 19:02	Bn. W 201, PM 104, R <sub>2</sub> 579, W 221. [Y 645. W 196, Si <sub>2</sub> 103. W 244, RC 411.
186 187 188 189	40 32 1.2 68 16 55.3 115 45 31.8 54 8 20.5 79 17 10.7	71'10 76'10 65'83 66'82 64'79	5 4 2 4 1	18.95 18.96 19.00 19.01	Ar 291, Oe 1429, RC 413. W 265, R <sub>2</sub> 608. Oe 776, Bn. R <sub>2</sub> 632. W 236, Si <sub>1</sub> , Gl 320.
191 192 193 194 195	43 29 2'4 98 39 32'3 43 32 1'0 106 18 45'6 80 14 41'7	73.84 71.85 65.86 72.35 78.40	1 2 4 2 2	18·92 18·89 18·89 18·86	Bn. See <i>Notes</i> . Oe 1499. W 299, Si <sub>1</sub> , Y 681, Gl 330.
196 197 198 199 200	63 24 8·3 60 8 19·1 60 5 20·9 38 57 45·9 101 33 6·6	74'32 73'84 75'37 73'10 68'45	5 1 2 4 2	18·85 18·83 18·81 18·81	W 414. W 433, R <sub>4</sub> 672. Oe 1554, RC 440. W 344, Si <sub>3</sub> 110.
201 202 203 204 205	107 54 37'1 54 1 11'9 67 49 15'6 103 52 8'2 55 50 41'2	64.95 75.85 71.14 73.41 76.27	1 6 3 5	18·78 18·76 18·74 18·69	Oe 850, Y 700. W 471. W 380. W 515, R 319.
206 207 208 209 210	32 18 59.7 54 47 59.0 49 44 26.3 55 2 4.4 57 31 8.3	69.44 70.48 67.88 72.28 76.27	2 3 1 5	18 68 18.67 18.65 18.64 18.60	R 320. W 529, R, 721. W 543. W 587, R337, 12yr 130.
211 212 213 214 215	70 28 3.7 49 33 50.5 56 48 1.2 63 24 20.9 65 27 48.3	78·89 73·55 72·38 77·21 72·11	4 6 4 3 4	18·59 18·58 18·57 18·55	W 595. W 600, RO 473. W 610. W 628.
216 217 218 219 220	69 22 36·3 100 2 44·7 69 14 19·5 62 52 39·1 106 30 29·6	76·87 75·45 79·30 77·27 64·95	3 2 5 5 1	18.48 18.47 18.45	W 672. See <i>Notes</i> , R <sub>2</sub> 796. W 701. Oe 969.
221 222 223 224 225	76 21 0.0 90 52 37.0 93 15 18.4 46 59 35.1 39 6 55.3	72'13 77'88 78'86 73'78 72'01	5 2 2 1 6	18.38	W 541, T 538, 9yr 151. W 574, Si., L <sub>1</sub> 251, Gl 365. W 594, R 384, 12yr 144, W 763. [Sp 500, Y 789.

No.	Lalande.	Mag.	Mean R.A. 187	5.0. Epoch.	Obs.	Ann. Prec.
226 227 228 229 230	3126 3140 3149 3165 3166	7·8 7·8 6·5 7·2 6·8	1 36 41 1 37 13	76.85 774 76.85 789 76.55 78.92 75.29	2 6 1 4	+ 3°·390 3·670 3·408 3·414 3·477
231 232 233 234 235	3181 3205 3244 3243 3267	7.5 7.5 6.5 7.0 8.0	I 38 28 I 39 42 I 40 3	69.88 73.54 76.68 76.68 76.68 76.68 76.68	4 3 5 3 4	3.364 3.000 3.009 3.342 3.035
236 237 238 239 340	33°1 331°0 3337 3379 337°	6.5 6.5 7.3 8.0 7.0	I 42 26 I 43 34 I 43 58	74.87 70.39 70.66 76.05 8.98 78.85 72.25	2 5 5 2 3	2·845 3·352 3·485 2·996 3·334
241 242 243 244 245	3378 3373 3410 3405 3419	7.5 6.6 8.0 7.2 7.0	1 44 51	67.82	3 2	3°285 3°798 3°022 3°330 2°994
246 247 248 249 250	3412 3439 3468 3476 3501	7.2 7.0 8.0 6.4 7.5	1 46 48 1 46 45 1 47 34	3.58 77.96 3.24 72.39 5.80 73.88 4.78 67.84 5.51 75.63	2 2 4 1 4	3.511 3.780 3.052 3.519 3.397
251 252 253 254 255	3518 3560 3547 3618 3596	8·o 7·3 5·5 5·0 7·7	I 50 6 I 50 25 I 50 48	3'27 77'82 5'09 78'12 5'87 70'60 3'94 78'93 71'16	1 4 3 1 4	3.685 3.781 4.342 2.807 3.401
256 257 258 259 260	3621 3640 3693 3683 3689	7.0 7.7 7.0 8.6 7.7	I 52 3 I 53 27 I 53 3	7:59 75:39 7:39 77:38 7:30 78:90 5: 3:70 73:10	4 4 1 5	3°473 3°273 2°908 3°204 3°184
261 262 263 264 265	3682 3697 3715 3755 3761	7.7 8.0 7.0 7.0 7.5	I 54 I 54 34 I 54 5	9:42 9:40 9:40 78:86 73:00 5: 1:83 78:24	4 2 2 3	3.420 3.354 3.356 2.772 3.211
266 267 268 269 270	3741 3758 3811 3835 3845	6·7 6·9 6·0 7·3 7·5	1 56 3 1 57 2 1 58 2	2·89 74·85 7·22 71·88 2·73 78·86 1·63 74·39 4·43 72·64	4 4 2 2 4	3.883 4.002 3.018 3.183 + 3.182

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
226	59° 37′ 31″•2	67.87	I	-18"·33	W 802.
227	42 25 8.2	74.85	4	18.30	Oe 1909.
228	58 26 18.6	76.22	6	18.30	W 820.
		78.92	1	18.38	W 832, Bn.
229			6	18.27	11 032, Dil.
230	53 41 24.8	73.01	U	10 27	
231	62 10 15'7	71.24	5	18.25	W 840.
232	97 23 44'2	73.54	3	18.23	W 683.
233	96 21 35.5	76.88	6	18.19	See Notes.
234	64 27 26.9	73.85	4	18.17	W 896.
235	93 44 26.0	69.20	7	18.12	W 715, Si <sub>2</sub> , Y 830, Gl
0.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•		[386.
236	111 28 7.1	67.43	4	18.11	Bn.
237	64 8 59.5	70.08	6	18.09	W 956, RC <sub>2</sub> 218.
238	54 46 32.1	75.00	7	18.04	W 981.
239	97 19 38.2	75.85		18.03	W 765, Si <sub>2</sub> .
240	65 58 3.4	71.72	3 6	18.01	W 1000.
'		' '			
241	70 6 22.2	76.23	3	18.01	W 1004, R 451.
242	39 8 37.2	67.85	ī	17.99	Oe 2076, RC 538, N7yr
243	94 50 26.8	68.34	2	17.98	W 788, Si <sub>2</sub> . [241, Y 864.
244	66 30 10.1	67.76	I	17.98	W 1020, RC <sub>2</sub> 221.
245	97 29 36*3	67.91	ī	17.97	W 795, Si <sub>2</sub> .
243	91 -9 3 3	0/92	1	-191	11 1939 ~~20
246	53 17 41.4	77.96	2	17.96	W 1027, PM 164, R461,
247	40 19 8.4	72.69	5	17.91	Oe 2112. Y 869.
248	91 55 56.7	73.10	4	17.91	W 819, Si5 156, L1 277, Gl 407.
249	53 29 14.0	67.84	I	17.89	T 621, Ar 416, Gl 413.
250	61 48 58.3	74.06	5	17.87	PM 168, R 471, R <sub>2</sub> 967,
251	44 38 34'1	70.80	3	17.84	W 1093, Oe 2156.
252	40 58 3.1	78.07	5	17.78	70,
253	25 59 17.7	66.32	5	17.77	Oe 2189, R2989, RC 569.
254	113 8 17.7	72:38	2	17.75	See Notes.
255	62 5 24.9	70.02	7	17.75	W 1168.
-33		,	′	-7,73	
256	57 23 16.6	75'39	4	17.71	W 1198.
257	72 15 2.6	75'47	5	17.70	W 1209, R, 1013.
258	104 28 54.0	78.90	ī	17.65	W 930, Si, 137.
259	78 14 0.0	67.85	1	17.64	W 928, R 502, R2 1029, L4 265,
260	79 58 38.0	73.10	5	17.64	W 935, R, 1035. [Gl 433.
261	61 22 5.1	69.65	4	17.63	W 1252.
262	66 9 42.0	78.23	3	17.62	W 1263.
263	67 12 38.8	71.56	3	17.60	D 75 Ct
264	115 1 28.3	64.95	1	17.28	Bn, Y 925, St 796.
265	77 55 4*3	78.24	3	17.55	W 972, L, 270, Y 930,
266	38 38 3.5	72.68	6	17.54	[Gl 443.
267		71.88	1	17.51	
268	34 58 41.6	78.86	4 2	17.48	Bn. [453.
269	80 29 2'2	1 '	2	17.44	W 1018, Si, Y 947, Gl.
		74'39	1	-17'42	W 1022, Y 948, Gl 455.
270	80 31 24.9	75.59	3	-1742	1022, 1 940, 01455.
			1	1	

No.	Lalande.	Mag.	Mean R.A	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
271 272 273 274 275	3854 3855 3857 3886 3889	7.0 7.3 6.7 8.0 7.3	1 <sup>h</sup> 58 1 59 1 59 1 59 2 0	27.74 37.61	78·30 73·78 67·90	4 1	+ 2 <sup>5</sup> ·858 3·360 3·436 3·014 3·065
276 277 278 279 280	3921 3922 3939 3953 3958	7.5 8.0 7.5 6.0	2 0 2 1 2 2 2 2 2 2	57.35 13.65 7.71 11.	64.95 78.88 70.92 76.86	I I 2	2·831 3·058 3·430 2·944 2·985
281 282 283 284 285	3943 3994 4042 4057 4053	8·2 8·0 8·0 7· 7·4	2 2 2 3 2 4 2 5 2 5	43.48 51.53 42. 4.	70·93 76·09	3 6	3.762 3.367 2.906 2.877 3.106
286 287 288 289 290	4060 4077 4058 4094 4114	6·3 7·3 7·8 7·5 6·5	2 5 2 5 2 5 2 6 2 7	14.59 47.56 53.26 34.58 23.32	78·92 72·06 70·87 74 92 74·86	1 5 2 3 2	2·942 3·098 3·474 3·399 3·449
291 292 293 294 295	4119 4141 4159 4182 4190	6·7 6·5 7·7 7·2 6·3	2 7 2 8 2 9 2 10 2 11	53.70 15.61 9. 5.12 9.92	68·93 77·90 74·5² 71·25	2 2 3 3	3.837 3.383 3.792 3.858 3.818
296 297 298 299 300	4254 4271 4287 4296 4321	6.0 6.0 7.3 6.5 var.	2 II 2 II 2 I2 2 I2 2 I3	10.44 54.55 31.06 45.97 2.13	76.91 67.32 78.56 70.39 67.88	3 2 3 5 1	3·326 3·373 3·507 3·488 3·027
301 302 303 304 305	43 <sup>2</sup> 2 43 <sup>1</sup> 3 43 <sup>5</sup> 3 43 <sup>6</sup> 7 43 <sup>7</sup> 7	7:3 6:5 8:0 7:0	2 13 2 13 2 14 2 15 2 15	34.52 39.51 54.57 38. 57.09	76·87 72·65 71·67 70·99	3 4 4 5	3.466 3.784 3.451 3.647 3.591
306 307 308 309 310	4410 4381 4415 4418 4449	6·o 6·9 7·5 7·2 5·7	2 16 2 16 2 17 2 17 2 18	11.60 12.67 23.87 38.79 7.04	79.90 75.84 71.93 74.11 67.86	2 1 5 5 1	2·826 3·735 3·484 3·631 3·206
311 312 313 314 315	4487 4470 4504 4493 4490	6.0 6.9 7.5 7.5 6.5	2 18 2 19 2 19 2 19 2 20	43.55 14.56 41.07 46.79 37.66	64.93 71.97 78.57 70.39 65.00	1 3 3 5 1	2*694 3*539 3*149 3*438 + 4*170

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
271 272 273 274 275	107° 53′ 14″·4 66 15 33·4 61 19 42·0 94 57 45·8 90 33 45·2	66·83 76·29 69·78 67·85 67·90	2 5 3 1	-17":42 17:39 17:38 17:37 17:36	Oe 1279. R 532, Bn. W 1402. W 1048, Sp 616. W 1053, Si <sub>5</sub> 176, L <sub>1</sub> 315.
276 277 278 279 280	109 44 8.6 91 12 7.4 62 11 59.2 100 38 8.9 97 16 23.4	64.95 78.88 70.64 74.90 75.86	1 4 2 5	17.33 17.31 17.27 17.27	Oe 1311. See Notes. W 1465. W 1097, Si <sub>3</sub> 168. Bn.
281 282 283 284 285	44 39 52.6 66 47 33.0 103 31 6.4 105 39 34.8 87 8 13.4	70'34 74'63 65'83 67'84 73'12	5 7 1 4	17.25 17.20 17.16 17.14 17.13	W 26. W 33, Si <sub>4</sub> 147.
286 287 288 289 290	100 38 12.0 87 50 37.5 60 1 42.3 64 59 19.3 61 53 27.9	78·92 71·75 67·47 73·14 76·89	5 4 3	17'13 17'11 17'11 17'07 17'04	W 48, Bn, Si <sub>3</sub> 172. W 58, Sp 642, Gl 482. W 138.
291 292 293 294 295	42 46 12.9 66 18 21.8 44 44 35.1 42 25 52.4 44 6 20.7	65.43 71.95 74.95 74.52 71.25	4 3 1 3 3	17:01 16:91 16:86	W 156. Oe 2581.
296 297 298 299 300	70 40 42'9 67 24 35'6 59 14 10'1 60 23 14'9 93 32 43'3	76·91 68·88 77·66 70·39 66·66	3 3 4 5 5	16.86 16.82 16.79 16.78	See <i>Notes</i> .  R <sub>2</sub> 1174. W 270. o Ceti, see <i>Notes</i> .
301 302 303 304 305	61 50 20°2 45 58 26°0 62 58 5°0 52 19 0°3 55 7 44°9	76.87 70.10 70.58 67.84 70.99	3 5 6 1 5	16·74 16·74 16·68 16·64 16·63	Bn. W 285. W 342.
306 307 308 309 310	108 13 58·2 48 28 3·2 61 19 26·3 53 26 53·0 79 57 23·4	79 90 75 18 71 43 72 11 66 66	2 4 6 6 3	16.62 16.56 16.55 16.55	Bn, Y 1058. W 347, see Notes. W 372. W 376. See Notes.
311 312 313 314 315	116 24 53.3 54 57 0.9 84 16 15.4 64 31 18.8 35 1 28.9	64.93 71.71 79.41 69.47 59.98	1 5 4 6 2	16.49 16.42 16.44 - 16.40	Oe 1539, St 957. W 423. Oe 2789, RC 717.

No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
316 317 318 319 320	4553 4569 4535 4572 4545	8.0 7.5 6.5 6.0 6.5	2 <sup>h</sup> 21 <sup>m</sup> 6 <sup>s</sup> ·88 2 21 27 2 21 39·75 2 22 6·23 2 22 25·16	73:26 70:90 72:66 69:88	3 1 4 1	+ 3**·054 2*970 3*857 3*400 4*292
321 322 323 324 325	4607 4586 4589 4601 4627	7.5 6.8 7.3 7.2 7.0	2 22 41. 2 22 52.46 2 23 7.49 2 23 43.74 2 24 7.42	71.65 75.92 74.85 70.72	3 2 4 4	2*908 3*718 3*877 3*884 3*677
326 327 328 329 330	4641 4681 4710 4739 4720	7'3 5'5 8'5 8'0 6'6	2 24 16.04 2 25 2.18 2 25 46.80 2 26 23.52 2 26 42.59	80.91 71.97 69.91 73.00 73.16	5 3 1	3'473 3'097 3'048 3'161 3'595
33 <sup>1</sup> 33 <sup>2</sup> 333 334 335	4779 4752 4765 4784 4824	6·5 6·0 7·3 6·2 7·	2 27 53° 2 27 56°85 2 28 38°27 2 29 9°25 2 29 17°92	70.52 70.73 76.98 72.94	4 5 2 1	2.771 3.673 3.795 3.709 2.928
336 337 338 339 340	4799 4802 4818 4830 4882	6·8 6·5 7·5 6·5 7·5	2 29 30.54 2 29 35.08 2 29 48. 2 30 34.18 2 31 36.26	71.97 78.40 72.46 71.51	5 2 2 4	3°734 3°586 3°436 3°692 3°358
34 <sup>1</sup> 34 <sup>2</sup> 343 344 345	4867 4927 4952 4960 4980	7.0 3.7 7.0 6.9 8.0	2 32 40.67 2 33 4.50 2 34 6.99 2 34 32.21 2 34 32.76	71.23 67.85 76.53 70.90 66.38	4 1 5 2 1	4.614 3.069 3.347 3.562 3.153
346 347 348 349 350	4918 4975 5041 - 5058 5076	8·7 4·2 8·0 7·5 7·0	2 34 39.55 2 35 39.96 2 36 25.21 2 37 9.70 2 37 46.	72·18 73·32 67·85 75·86	5 3 1	4.625 4.028 2.822 3.026 2.946
35 <sup>1</sup> 35 <sup>2</sup> 353 354 355	5°74 5102 5129 5114 5140	6·8 6·8 7·5 7·9	2 37 47'41 2 39 14'95 2 39 33'20 2 39 45'28	69.88 71.49 72.79 74.76	2 2 5 2	2.974 3.682 2.827 3.584 2.990
356 357 358 359 360	5134 5136 5176 5172 5205	6.8 6.5 6.5 7.1	2 40 5.78 2 40 47.06 2 41 39.46 2 42 24.06 2 42 30.94	70.80 78.57 70.12 73.00 72.47	6 3 5 1 4	3'427 3'987 3'720 4'453 + 3'574

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
316 317 318 319 320	91° 18′ 52″·5 97 29 23°0 44 31 31·4 67 5 26·4 32 31 58·4	72.06 64.87 68.38 71.50 69.39	4 1 2 5 2	- 16"*37 16*35 16*34 16*32 16*31	W 324, Si <sub>2</sub> , Si <sub>3</sub> 195, L <sub>1</sub> , W 332, Si <sub>2</sub> [354,Gl 548. Oe 2866. R 631, R <sub>2</sub> 1267.
321 322 323 324 325	101 54 14.6 50 23 21.3 44 9 43.3 43 58 10.3 52 25 59.3	66·34 69·97 72·23 74·85 70·72	5 3 4 4	16·30 16·24 16·24 16·24	Oe 2831. Oe 2848. W 545.
326 327 328 329 330	62 59 10·4 88 17 18·2 91 44 52·6 -83 35 48·9 56 45 30·3	80.91 71.97 69.91 67.90 72.31	5 3 3 5	16.08 16.10 16.18 16.51	W 555. [1119, Gl 561. W 399, T., R., 1298, Y W 410, Bn, Sp 709, L, W 420, T850, Gl 571 [366 W 612.
33 <sup>1</sup> 33 <sup>2</sup> 333 334 335	110 33 0.7 53 14 9.8 48 8 46.8 51 48 26.8 99 53 55.7	67.85 70.52 70.73 76.98 72.94	1 4 5 2 1	16.02 15.96 15.96 15.02	Bn. W 642, PM 249, R <sub>2</sub> 1323, W 657. [Y 1131. W 669, R 664, R <sub>2</sub> 1334, Y 1141. W 476, Si <sub>3</sub> , Si <sub>3</sub> 205, Sp 727.
336 337 338 339 340	50 38 57.9 57 39 20.3 65 53 52.1 52 48 56.6 70 48 52-3	71.97 77.24 66.15 66.19 66.43	5 3 4 4 6	15.94 15.93 15.92 15.88 15.83	W 679. W 683. See <i>Notes.</i> W 701, Y 1156. W 733, R 676, R, 1355.
341 342 343 344 345	28 10 48·1 90 12 41·7 71 44 15·0 59 35 58·0 84 27 55·9	7°.73 65.85 76.53 69.86 66.38	4 5 5 3 2	15.77 15.75 15.69 15.67	Oe 3015. δ Ceti, see <i>Notes</i> . W 795, PM 260. W 806. W 580,T 898,Ar583,R <sub>s</sub> [1386,Y 1183, Gl 612.
346 347 348 349 350	28 16 41.0 41 18 5.7 106 33 22.5 93 3 52.9 98 26 28.6	70°14 68°00 67°85 68°56 67°91	6 5 1 3	15.66 15.61 15.56 15.52 15.49	Oe 3060. See Notes. Oe 1756. W 624, Si <sub>2</sub> . W 632, Si <sub>2</sub> .
351 352 353 354 355	96 32 32 0 54 32 36 8 105 57 25 9 59 7 50 7 95 29 5 3	69.88 68.52 64.87 72.79 74.46	2 5 1 5 2	15.49 15.41 15.40 15.39 15.38	Bn, Sp 764. W 915, Y 1207. Oe 1786. W 929. W 666, Si <sub>r</sub> .
356 357 358 359 360	67 33 53.9 43 18 17.6 53 11 45.4 32 12 17.4 59 59 34.9	70·80 75·24 68·44 66·45 72·47	6 3 6 2 4	15.36 15.32 15.23 15.23 —15.22	W 941. Oe 3189. W 977, R <sub>2</sub> 1419. W 1005.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
361 362 363 364 365	5252 5221 5248 5257 5258	7.5 6.0 7.2 7.0 6.7	2 <sup>h</sup> 42 <sup>m</sup> 56 <sup>s</sup> · 2 43 19·91 2 43 38·75 2 44 23·11 2 44 50·48	74 <sup>.02</sup> 76 <sup>.</sup> 44 71 <sup>.</sup> 18 71 <sup>.</sup> 55	3 2 5 5	+ 2 <sup>5</sup> ·731· 3·987 3·367 3·725 4·052
366 367 368 369 370	5306 5262 5285 5499 5353	8.0 6.5 7.0 7.0	2 45 4.73 2 46 7.33 2 46 28.64 2 46 44.68 2 47 11.10	75.86 71.96 71.63 67.85 74.34	1 1 3 1 3	3.018 4.875 4.749 2.916 3.095
371 372 373 374 375	5374 53 <sup>8</sup> 3 53 <sup>6</sup> 2 53 <sup>6</sup> 5 54 <sup>10</sup>	7.5 7.0 7.2 7.0 7.7	2 47 26.81 2 47 40. 2 47 58.72 2 48 8.66 2 48 49.55	67·85 75·64 70·96 76·90	3 5 2	2.942 2.700 3.532 3.600 3.071
376 377 378 379 380	5449 5435 5440 5468 5481	6·5 7·8 6·6 6·8 7·0	2 50 21.65 2 50 27.32 2 50 41.64 2 51 20.44 2 52 17.03	64.97 72.72 73.21 78.92 70.25	1 4 5 1 5	3.005 3.616 3.636 3.469 3.775
381 382 383 384 385	55 <sup>1</sup> 5 553 <sup>2</sup> 5540 5490 555 <sup>2</sup>	6.0 7.0 6.5 6.7 7.5	2 52 24'35 2 52 43'79 2 53 51'04 2 53 55'93 2 53 59'24	80·92 75·86 72·76 71·33 74·34	1 4 3 3	3.020 2.906 3.641 4.748 3.311
386 387 388 389 390	5581 5563 5672 5579 5644	7.0 7.0 5.0 6.0 7.7	2 54 33.00 2 55 22. 2 56 53.22 2 56 53.22 2 57 5.01	78·92 69·03 74·94	I	3.018 4.077 2.655 4.948 3.430
391 392 393 394 395	5636 5658 5629 5722 5690	7.0 6.5 7.0 6.4	2 57 29.47 2 57 42.86 2 58 56.26 2 59 4.68 2 59 14.16	70°12 74°91 72°02 78°92 72°21	5 2 3 1 5	3.950 3.760 4.495 2.928 4.075
396 397 398 399 400	5724 5756 5689 5759 5769	5°2 8°0 7°0 5° 7°5	2 59 32.12 3 0 25.08 3 0 55.08 3 1 25.13	77.94 71.26 71.19	2 2 5	3.285 2.838 5.049 2.968 4.040
401 402 403 404 405	5808 5830 5849 5833 5925	6·5 7·7 7·7 7·3 7·0	3 2 41°05 3 2 54°36 3 3 27°70 3 3 39°93 3 5 3°42	74'10 73'20 73'44 69'00 70'47	1 5 2 2 2	3.567 3.445 3.449 4.063 + 2.999

361	No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
362			6-10		"	0
363	361			1		
364			74.03			Ue 3230.
365	363		73.20			W 1037, R 722, R2 1444.
366 93 30 51°0 75°86 1 15°07 R, 1462. 368 27 54 1°1 68°78 5 14'98				7		W 1042.
367         26         10         43:5         71:96         1         15:02         R <sub>8</sub> 1462.         0e         3269.         369         99         57         22:1         65:85         5         14:98         W 788, Si, Si, Si, 225.         W 795, Sp 807, Gl 660.           371         98         15         37:6         67:85         1         14:95         W 804, Sp 811.         0e         18:78, Y 1248, St 1179.           372         112         36         67         65:83         1         14:93         W 1228, R 739.         W 1128, R 739.           374         59         27         57:0         69:81         7         14:90         W 1128, R 739.         W 1128, R 739.           376         94         13         0.9         64:97         1         14:76         W 1133.         W 31, Y 1257, Gl 670.           376         94         13         0.9         64:97         1         14:76         W 1184.         W 1193.           377         58         59         15:1         71:96         5         14:76         W 1184.         W 1190.           381         93         16         56:8         80:92         1         14:76         W 1223, T 993, R.	365	41 56 41.5	70.00	6	12.09	Oe 3247, RU813.
368	366					W 763, Si <sub>2</sub> .
369	367	26 10 43.5		1	15.02	R <sub>2</sub> 1462.
369	368	27 54 1.1		5		Oe 3269.
370	369		65.85	5	14.98	W 788, Si <sub>2</sub> , Si <sub>3</sub> 225.
372	370	88 32 17.4	74'34	3	14.95	W 795, Sp 807, Gl 660.
372	371	98 15 37.6	67.85	I	14.04	W 804, Sp 811.
373			65.83	1		Oe 1878, Y 1248, St 1170.
374				3		W 1128, R 730.
375						W 1132.
376						W 821, Y 1257, Gl 670.
377		, , , , ,		3	-4-3	
378         58         2         43'2         73'21         5         14'75         W 1190.           379         66         22         9'8         78'92         1         14'71         W 1202, R, 1521, Bn.           380         52         22         3'7         66'93         6         14'65         W 1222, R, 1521, Bn.           381         93         16         56'8         80'92         1         14'64         W 895, Gl 687.           383         58         5         3'2         72'76         4         14'56         W 1264, PM 297. [232.           384         28         45         49'4         71'33         3         14'55         W 2363, R, 7530, Bn see Notes.           385         75         27         51'3         76'23         4         14'56         W 945, T 1015, Si2, N7yr           386         93         22         37'3         71'94         2         14'35         W 945, T 1015, Si2, N7yr           387         42         38         39'0         67'40         2         14'36         See Notes.           388         114         6         54'9         6'85         1         14'37         W 1341.           39	376		64.97	I	14.76	W 861,Si <sub>2</sub> ,Sp827,Gl676
378		58 59 15.1	71.96	5	14.76	W 1184.
379		58 2 43.2	73.21		14.75	W 1190.
380		66 22 9.8				W 1202, R, 1521, Bn.
382			66.93	6	14.65	W 1223, T 993, R.
382	281	02 16 56.8	80:02	т	14:64	W 805, Gl 687
383         58         5         3.2         72.76         4         14.56         W 1264, PM 297. [232.]         384         28         45         49.4         71.33         3         14.55         W 268, R 1530, Bn see Notes.         0e 3363,R 1530, Bn see Notes.         W 928, R 766, Gl 697.           386         93         22         37.3         71.94         2         14.55         W 945, T 1015, Si2, N 7yr [387, St 1240.]         See Notes.         [385, St 1240.]         See Notes.         Oe 3411.         W 1341.         W 1341.         W 1341.         W 1341.         W 1349.         See Notes.         Oe 3411.         Oe 3411.         W 1349.         Sen.         See Notes.         Oe 3451.	382					W 002, Ar 642, Si. Si.
384	282					W 1264 PM 207 [222
385	284					On 2262 P. 7520 Pr. 500 Notes
386         93         22         373         71'94         2         14'51         W 945, T 1015, Si2, N7yr [385, 389]         26 25         47'5         67'40         2         14'46         See Notes.         See Notes.         Oe 3411.         W 1343.           389         26 25         47'5         64'51         2         14'37         Oe 3411.         W 1343.           391         46         47         11'2         69'29         6         14'33         W 1341.         W 1349.           392         53         41         20'8         74'91         2         14'25         Bn.         349.         Bn.         398         33         28'33'         72'02         3         14'24         W 1030.         Oe 3451.           396         77         17         46'8         73'91         3         14'24         W 1033, R 777, Gl 714.         W 1050, Si, 219, Sp876.         Oe 3451.         Oe 3461.         W 1050, Si, 219, Sp876.         Oe 3461.         W 1054, Si2.         Oe 3504.         Oe 3504.         W 1054, Si2.         Oe 3504.         Oe 3504.         W 1474, Bn.         W 24, R2 1589.         W 24, R2 1589.         Y 24, R2 1589.	385					W 928, R 766, Gl 697.
387         42         38         39°0         67°40         2         14°46         [385, St 1240.]           388         114         654°9         67°85         1         14°37         See Notes.           389         26         25         47°5         64°51         2         14°37         Oe 3411.           390         69         1         48         74°95         1         14°36         W 1343.           391         46         47         11°2         69°29         6         14°33         W 1341.           392         53         41         20°8         74°91         2         14°32         W 1349.           393         32         8         3°3         72°02         3         14°25         Bn.           394         98         45         37°3         75°26         3         14°24         W 1030.           395         43         10         33°9         72°21         5         14°23         W 1030.           396         77         17         46°8         73°91         3         14°21         W 1033, R 777, Gl 714.           397         103         55         15°5         67°90	206		# * ! O .			Word Trace St Name
388         114         6         54'9         67'85         1         14'37         See Notes.           389         26         25         47'5         64'51         2         14'37         W 1341.           390         69         1         4'8         74'95         1         14'36         W 1341.           391         46         47         11'2         69'29         6         14'33         W 1341.         W 1349.           392         53         41         20'8         74'91         2         14'32         W 1349.           393         33         28         3'3         72'02         3         14'25         M.           394         98         45         37'3         75'26         3         14'24         W 1030.           395         43         10         33'9         72'21         5         14'23         W 1030.           396         77         17         40'8         73'91         3         14'21         W 1033, R 777, Gl 714.           397         103         55         15'5         67'90         1         14'17         W 1050, Si, 219, Sp876.           398         25         34	300					w 945,1 1015, Si, N7yr
389         26         25         47:5         64:51         2         14:36         Oe 3411.         W 1343.           391         46         47         11:2         69:29         6         14:33         W 1341.         W 1349.           392         53         41         20:8         74:91         2         14:32         W 1349.           393         33         28         3:3         72:02         3         14:25         Bn.           394         98         45         37:3         75:26         3         14:24         W 1030.           395         43         10         33:9         72:21         5         14:23         Oe 3451.           396         77         17         46:8         73:91         3         14:21         W 1033, R 777, Gl 714.           397         103         55         15:5         67:90         1         14:17         W 1050, Si, 219, Sp876.           398         25         34         59:3         64:84         2         14:16         W 1050, Si, 219, Sp876.           399         96         34         25:2         74:57         3         14:14         W 1054, Si,           400<	307					[385, 8t 1240.
390						
391		20 25 47.5				Oe 3411.
392	390	69 1 4.8	74'95	1	14.36	W 1343.
392	391	46 47 11.2	69.29	6	14'33	W 1341.
393   33 28 3'3   72'02   3   14'25   Bn.   W 1030.	392		74.91	2	14.32	W 1349.
394 98 45 37'3 75'26 3 14'24 W 1030. Oe 3451.  396 77 17 46'8 73'91 3 14'21 W 1033, R 777, Gl 714. W 1050, Si, 219, Sp876. Oe 3451.  398 25 34 59'3 64'84 2 14'16 Oe 3461. W 1050, Si, 219, Sp876. Oe 3461. W 1050, Si, 219, Sp876. Oe 3461. W 1050, Si, 219, Sp876. Oe 3504.  401 62 39 23'3 74'10 1 14'07 Oe 3504.  401 62 39 23'3 74'10 1 14'07 W 1474, Bn. W 164, Si, 20 0e 368 43 51'6 73'20 5 14'00 W 24, R, 21589. W 24, R, 21589.		33 28 3.3	72.02	3	14.25	Bn.
395			75.26		14.54	W 1030.
397			72.21		14.53	
397	306	77 17 46.8	73.01	2	14.51	W 1033, R 777, Gl 714.
398						W 1050, Si, 210, Sp876.
399 96 34 25'2 74'57 3 14'14 W 1054, Si <sub>2</sub> .  400 44 32 18'8 71'72 4 14'07 Oe 3504.  401 62 39 23'3 74'10 1 14'01 W 1474, Bn.  402 68 43 51'6 73'20 5 14'00 W 5.  403 68 34 52'0 73'44 2 13'97 W 24, R <sub>2</sub> 1589.  404 44 5 18'1 69'89 1 13'95						
400     44     32     18.8     71.72     4     14.07     Oe 3504.       401     62     39     23.3     74.10     1     14.01     W 1474, Bn.       402     68     43     51.6     73.20     5     14.00     W 5.       403     68     34     52.0     73.44     2     13.97     W 24, R2 1589.       404     44     5     18.1     69.89     1     13.95				1		W 1054 Si.
401 62 39 23'3 74'10 1 14'01 W 1474, Bn. W 540 W 540 W 540 W 550 W 540 W 550 W 540 W 550 W 540 W 540 W 550 W 540 W						
402   68 43 51.6   73.20   5   14.00   W 5. 403   68 34 52.0   73.44   2   13.97   W 24, R <sub>2</sub> 1589. 404   44 5 18.1   69.89   1   13.95	407	60 00 000	7.417.0		1.410.	W 1474 Rn
403   68 34 52 0 73.44   2   13.97   W 24, R <sub>2</sub> 1589.		0, 00				W r
404   44 5 18.1   69.89   1   13.95						W 24 B 1580
		0. 5				11 24, 10, 1509.
405   94 17 50   70 47   2   -13 00   W 50, SI <sub>2</sub> , G1 739.						W ro Si Class
	405	94 17 50	70.47	2	-13.90	17 50, SI <sub>2</sub> , GI 739.

No.	Lalande.	Mag.	Mean R.	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
406	5896	6.0	3 <sup>h</sup>	6m 13*86	72.09	1	+ 4**548
407	5953	7.0	3	6 48.78	72.21	5	3.398
408	5961	6.8	3	7 0.77	76.36	5	3.475
409	5996	7.0	3	7 19.64	67.91	I	2.708
410	5958	7.0	3	7 21.88	71.12	5	3.480
410			3	/ 21 00	/115	3	3 700
411	5989	7.8	3	8 29.54	74.98	1	3.842
412	6001	6.8	3	9 1.28	70.46	2	3.897
413	6072	8.0	3 1	0 0.65	71.96	1	2.926
414	6040	6.2		0 1.89	75.66	3	3.658
415	6026	7.9	3 1	0 4.88	72.04	3	4.033
416	6079	7.5	3 1	0 29.93	71.96	5	3.185
417	6100	8.0		0 55.28	75.92	4	2.992
418	6106	7.3		1 29.43	70.01	i	3'332
419	6158	6.0	1 5	2 50	,		2.650
420	6140	8.0		3 11.04	74.94	I	3.421
421	6142	7.5	3 1	3 14.00	69.31	5	3.424
422	6166	7.6			73.54	4	3.000
	6210	7.0				4 I	
423				5 36.72	71.92	2	3.272
424	6233	7.6		7 3'43	72.04		4.088
425	6275	7.0	3 1	7 11.52	71.26	5	2.922
426	6254	7.2	3 1	7 15'01	78.43	2	3.616
427	6268	6.0		7 17.58	75.19	4	3.501
428	6312	7.0		8 32.84	81.90	I	2.809
429	6302	7.0		9 0.52	70.20	6	3.621
430	6318	7'5		5.46	75.17	5	4.038
431	6358	7.7	3 2	0 37.86	74.98	1	3.455
432	6333	7.0		37.56	71.66	3	4.996
433	6368	7.0	1	43.31	74.01	5	4'163
434	6402	7.3		1 59.72	76.44	2	3.340
435	6392	6.9		2 21,00	70'16	5	3.995
			3 -	99	10.20	1	3 993
436	6403 6486	7.4	1 -	2 55.25	75.97	3	3.981
437		7.0		3 48.		_	2.694
438	6475	6.7		7'13	72.40	5	3.178
439	6469	6.0		4 42.2	80.01	I	3.802
440	6487	8.0	3 2	25 10.36	73.55	2	3.801
441	6515	7.5		25 24.43	74.28	5	3.000
442	6494	7.0		25 32.50	70.43	4	3.876
443	6522	7.2		26 34.16	71.47	2	3.902
444	6603	7.3	3 2	19.01	74.01	6	3 183
445	6634	7.0	3 2	8 36.81	73'44	4	2.881
446	6626	7.0	3 2	8 37.89	80.01	1	3.001
447	6579	7'1		9 22.64	69.93	3	4.836
448	6638	8.0		9 39'93	73.70	4	3.579
449	6661	6.2		0.62	71.06	1	2.854
450	6668	7.5		57'10	72.04	4	+4.163
							31 1

No.	Mean N.P.D. 1875.0.	Epoch. Ob	s. Ann. Prec.	Authorities.
406	33° 19′ 39″·1	68.37 2	-13".79	Oe 3581, RC 901.
407	71 29 48.1			W 110, R 810.
408		1	13.75	W 116, R 21621.
			13.74	
409	110 20 55.2	67.91 1	13.72	Oe 2117.
410	53 59 29.5	71.12 2	13.41	
411	51 49 43.2	74.98 1	-0.0	W 149, R 818.
412	49 58 44*2	66.94 3		W 157, 9yr 300.
413	98 23 21.0	71.96 1	13.22	W 149, Sp 938, see <i>Notes</i> .
414	59 19 57.4	71.76 4		W 183.
415	45 44 23.1	69.00 4		W 179, RC 919.
416	83 39 40.7	71.96 5	13.23	W 154, Sp 943, Gl 754.
417	94 36 2.3	75.92 4		W 170, Sp 949.
418	75 16 16.0	70.01 1		W 173, Y 1376, Gl 763,
419	- 112 58 8.8	67.90 2	1 0 10	See Notes.   see Notes.
420	70 43 27.7	74.94	1 00	W 258, PM 327.
420	10 43 277	14 94	13 34	11 250, 111 32/
421	70 34 56.2	66.65	13.34	W 261.
422	88 58 17.5	73'24 4		W 222, Si <sub>1</sub> .
423	63 32 49.5	65.98 2		, ·
424	44 55 42.4	68.00 3		W 324, Oe 3754.
425	98 14 1.3	71.26 2		W 278, Si <sub>2</sub> , Y 1408.
426	61 47 27.2	78:42	14:07	W 334, see Notes.
	1	78.43	, ,	
427	77 48 56.4	74.98 4		W 275, R 852, Gl 788.
428	104 26 14.3	81.00	. 1	W 308, Si, 243, Sp 998.
429	61 43 18.1	68.05	12.96	W 370.
430	46 41 0.8	75'17 5	12.89	W 386, R 855, RC 968.
431	69 30 41.3	74.98	12.85	W 407.
432	28 9 47.5	68.72 4	12.78	
433	43 22 10.3	73.98		Oe 3836.
434	75 26 14.6	76.44		W 363, Gl 805.
435	48 13 43.3	67.76		0 0,
436	48 42 15.3	75*97	12.69	W 437.
437	100 20 10.2	64.93	'	Bn. 437.
437	84 14 27.2	1		
		73.46	, ,	
439	54 57 54.4	80.01	1	W 484.
440	55 1 36.0	64.61	12.24	W 494.
441	93 55 31.2	74.28		W 432, Si, Gl 820.
442	52 24 39.3	70.43		W 500.
443	51 36 54.2	66.93		R, 1775.
444	84 0 7.9	72.65 6		W 488, Si <sub>1</sub> , Gl 834.
445	100 17 19.1	73'44		TTT 4 01 0
446	93 49 53.9	81.86	12.30	W 502, Si2, Gl 836.
447	30 58 4.5	1		Oe 3952, RC 1017.
447		1 1		W 607, see Notes.
				W 536, R, 1822, Si, 286,
449				RC 1031. Sp 1078.
450	44 23 6.6	72.04	- 12.07	10 1031. [SP 1070.
	1	1	1	

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
451 452 453 454	6708 6726 6761 6739 6764	7.0 7.0 7.0 7.0 7.8	3 <sup>h</sup> 32 <sup>m</sup> 19 <sup>s</sup> ·91 3 32 23·12 3 33 26·69 3 34 40·31	74.28 74.32 69.90 73.34	3 5 1 3	+ 3*·329 2·925 2·867 3·650
455 456 457 458 459 460	6861 6833 6820 6885 6912	6.5 7.4 5.5 7.0 6.0	3 34 58.40 3 35 47. 3 36 14.78 3 36 26.15 3 36 36.82 3 37 35.64	71.74 75.96 71.33 64.93 69.93	5 5 1 2	4.069 2.679 3.600 3.861 2.565 2.863
461 462 463 464 465	6842 6938 6911 6951 6998	6.5 7.0 4.8 7.0 5.0	3 37 45.20 3 38 16.74 3 38 23.33 3 39 56.95 3 40 14.05	74.99 71.96 67.97 73.94 67.92	3 1 4 1	4.656 2.686 3.557 3.789 2.830
466 467 468 469 470	6991 7003 7017 7066	6·9 6·5 8·8 8·0 7·8	3 40 56.96 3 41 50.69 3 41 57.44 3 42 44.71 3 42 59.07	71.52 70.57 73.00 74.46 75.97	4 5 1 3 2	3.539 3.916 4.241 4.244 3.257
471 472 473 474 475	7019 7094 7106 7100 7097	6.0 6.5 7.0 7.0 7.0	3 43 34·84 3 44 16·15 3 44 46·59 3 45 46·83 3 45 52·61	70.93 74.57 71.81 73.62 70.52	2 5 5 3 2	4.816 3.733 3.767 4.758 4.946
476 477 478 · 479 480	7173 7158 7146 7201	7.0 6.6 3.0 7.0 8.6	3 45 52.85 3 46 2.95 3 46 16 3 47 1.12 3 47 9.20	69·90 76·45 72·35 74·97	1 2 3 1	2°720 3°599 3°756 2°934 3°600
481 482 483 484 485	7185 7226 7253 7236 7243	6.5 7.0 4.0 7.0 7.5	3 47 34'28 3 47 44'84 3 48 23' 3 49 25'55 3 49 41'26	71.01 81.01 76.93	5 2 5 5	3.727 2.765 2.549 3.894 3.898
486 487 488 489 490	7266 7316 7294 7312 7325	7.5 5.9 7.3 6.8 8.0	3 49 52·26 3 50 33· 3 50 53·29 3 51 28·30 3 51 36·	71.99 72.01 69.02	5 4 1	3.504 2.848 3.569 3.647 3.559
491 492 493 494 495	73 <sup>2</sup> <sup>2</sup> 7353 74 <sup>2</sup> <sup>2</sup> 744 <sup>2</sup> 7456	7'3 8'1 6'5 7'0 5'4	3 52 26.60 3 53 20.14 3 53 38.42 3 54 9.01 3 54 35.	74'95 75'95 70'97 82'05	2 2 5 1	4.299 4.299 2.810 2.698 + 2.555

No.	Mean N.P.D. 1875.0	Epoch. Obs	Ann. Prec.	Authorities.
451 452 453 454 455	76° 30′ 53″·3 97 48 2·6 100 50 28·0 61 42 8.0 47 13 59·0	70.68 3 74.32 5 64.91 2 73.34 3 71.74 4	- 12"'05 12'04 11'97 11'95 11'86	W 569, Y 1486, Gl 847. W 585. W 609, Si <sub>2</sub> , Si <sub>3</sub> 291, Sp W 705, R <sub>2</sub> 1859. [1100. W 729.
456 457 458 459 460	109 59 15.1 64 1 5.0 53 56 11.2 115 3 6.6 100 52 59.8	64.93 I 75.96 5 71.33 5 64.93 I 69.93 2	11.80 11.77 11.76 11.75 11.67	Oe 2454. W 766, Y 1512. Oe 2467, St 1542. See <i>Notes</i> .
461 462 463 464 465	34 28 10·8 109 30 48·9 66 1 28·8 56 47 21·5 102 29 41·7	73'47 4 65'95 2 67'97 1 71'14 5 66'40 2	11.66 11.63 11.62 11.51	Oe 4091. Oe 2485, see Notes. W 829, T 1269, R 965, 129r, W 859, PM 379, [318, 797 261. W 753, Ar 800, RC 1074, [N797 475, Si <sub>3</sub> 304.
466 467 468 469 470	66 57 53'4 52 30 32'2 43 17 24'0 43 16 55'1 80 30 15'6	71.52 4 70.96 4 73.00 1 74.46 3 77.96 3	11.43 11.36 11.31 11.29	W 885, T 1286, R 987, W 896. [Y 1643. Oe 4196.
471 472 473 474 475	32 23 56·8 59 12 31·8 57 58 5·1 33 27 7·0 30 44 7·8	65.46 4 74.57 5 71.81 5 73.62 3 66.98 3	11.09 11.16 11.08	Oe 4208. W 948. Oe 4239. Oe 4240, Bn, see <i>Notes</i> .
476 477 478 479 480	107 32 32.8 64 41 26.6 58 29 22.2 97 0 27.5 64 41 10.1	64.92 2 78.29 3 66.07 3 71.52 4 74.97 1	11.08 11.00 11.00 10.09	Oe 2588. W 985, R 1015, Bn. See Notes. W 892, Ar 830, Si <sub>2</sub> , Sp W 1003, R <sub>2</sub> 2000. [1201.
481 482 483 484 485	59 19 27.7 105 20 35.9 114 59 0.3 53 52 12.8 53 45 15.7	67.87 7 81.01 2 67.93 2 70.58 5 76.93 5	10.95 10.89 10.80 10.80	W 1010. Oe 2619. See Notes. W 1041, Y 1722.
486 487 488 489 490	69 2 29°2 101 13 10°0 66 16 47°0 63 9 44°6 66 43 56°3	71.99 5 70.94 2 72.01 4 64.46 2 65.95 1	10.79 10.74 10.71 10.68 10.65	W 1057, R <sub>2</sub> 2026. [1225. W 963, Bn, Si <sub>3</sub> 324, Sp W 1080, R 1043, R <sub>2</sub> 2031. R 1045, R <sub>2</sub> 2035. W 1090.
491 492 493 494 495	42 54 19.5 42 50 49.4 102 55 49.2 108 16 10.9 114 22 19.5	74.95 2 75.95 2 70.97 5 82.05 1 67.94 2	10.60 10.53 10.50 10.47 - 10.43	Oe 4364. W 1039, Si <sub>4</sub> 297. Oe 2707. See <i>Notes</i> .

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
496 497 498 499 500	7383 7419 7475 7489 7470	7.0 7.0 8.0 7.2 6.5	3 <sup>h</sup> 54 <sup>m</sup> 46 <sup>s</sup> ·85 3 54 56·56 3 56 11·69 3 56 16·81 3 56 46·76	72·38 71·64 74·96 78·29 70·55	5 5 4 3 2	+ 4*·686 3 '926 3 '251 3 '049 3 '796
501 502 503 504 505	7498 7514 7561 7539 7584	7.3 7.2 7.0 6.0 7.5	3 57 32° 3 57 40°71 3 58 55°81 3 59 31°01 3 59 46°91	72·20 70·57 73·3 <sup>2</sup> 74·0 <sup>2</sup>	5 5 3 1	3.845 3.768 3.825 4.692 4.173
506 507 508 509 510	7643 7666 7507 7612 7647	7° 7°0 6°5 7°0 7°5	3 59 56·51 4 0 18·11 4 0 24·12 4 1 4·32	82.05 71.50 76.70 74.63	2 4 3	2 855 2.631 5.965 4.085 3.627
511 512 513 514 515	7661 7665 7683 7745 7753	7°2 7°0 7°0 8°0 7°5	4 1 22.75 4 1 44'23 4 2 38'05 4 2 41' 4 3 49'47	72'39 79'00 71'76 75'01	5 1 5	3.578 3.780 4.100 2.703 3.399
516 517 518 519 520	7815 7722 7803 7777 7832	7.5 6.5 7.5 6.5 6.2	4 4 25.90 4 4 47.23 4 4 56.90 4 5 0.51 4 6 34.49	70'94 65'11 79'01 73'37 71'77	2 I I 3 5	2·661 4·886 3·576 3·811 3·965
521 522 523 524 525	7892 7912 7899 7950 7936	7.0 7.5 7.3 6.5 8.5	4 7 19:35 4 7 32:85 4 7 59:95 4 8 22:23 4 8 34:55	76·20 64·93 72·01 82·05 74·01	4 5 1 4	3·3 <sup>2</sup> 3 2·849 3·79 <sup>2</sup> 2·726 3·13 <sup>2</sup>
526 527 528 529 530	7982 7967 8032 8020 7975	6·5 7·1 6·5 7·7 6·3	4 9 19'97 4 9 41'67 4 10 26' 4 10 47'22 4 11 41'99	72.00 77.95 73.75 70.98	4 5	2.721 3.410 2.555 3.118 4.850
531 532 <b>53</b> 3 534 535	8040 7983 8064 8156 8135	6·3 6·5 7·5 7·0 7·4	4 12 12·64 4 12 17·72 4 12 33·51 4 14 16·94 4 14 31·41	74.01 70.60 75.95 64.93 73.97	4 5 2 1 2	3·807 5·081 3·586 2·689 3·373
536 537 538 539 540	8103 8199 8178 8171 8198	6.5 6.5 3.7 7.2 8.0	4 14 53.89 4 15 30.49 4 15 43.62 4 16 9.26 4 16 16.36	71·78 79·49 67·97 71·18 73·50	4 4 1 5 4	4°157 2°934 3°445 3°912 +3°573

No.	Mean N.P.D. 1875 0.	Epoch.	Obs.	Ann. Prec.	Authorities.
496	35° 16′ 51″·9	72.38	5	- 10"·42	Oe 4397.
497		67.86	5 8	10'41	.077
498	53 13 48.6 81 8 6.3	71.46	6	10.31	
499	91 9 1.7	78.29	3	10.31	Sp 1265, L, 535.
500	57 46 28.5	68.67	3	10.52	W 1187.
501	56 6 9.9	65.94	I	10.51	W 1199.
502	58 50 46.5	72.50	5 6	10.30	W 1203, Bn.
503	56 53 37.8	69.16		10,11	W 1229.
504	35 30 14.5	68.00	5	10.07	Oe 4471.
505	48 50 47.5	74.02	I	10.02	W 1251, Bn, Y 1770'.
-506	100 38 10.1	82.05	I	10.03	0
507	110 51 9.5	67.96	2	10,00	Ое 2796.
508	21 49 46.6	65.76	4	10.00	Oe 4474.
509	48 49 54.7	76.70	4	10,00	W 1269, Bn, Y 1773'. W 1291, R, 2126.
510	64 27 26.7	77.56	5	9.95	W 1291, 16, 2120.
511	66 27 46.7	72.39	5	9.92	W 1297, R 1092, R22124.
512	58 41 1.8	79.00	I	9.90	W 1301, Bn.
513	48 34 47.6	71.76	5	9.83	W 1318, Bn.
514	107 35 9.7	64.93	1	9.82	Oe 2834, Bn.
515	74 22 53'4	73.20	6	9'74	W 22, Y 1791.
516	109 19 54.8	70.94	2	9.69	Bn.
517	32 51 42.6	64.98	I	9.66	
518	66 44 58.6	71.93	2	9.65	W 46, R 1106, R <sub>2</sub> 2158.
519	57 47 26.0	75°51	4	9.64	*** 0
520	52 46 35.9	69.82	6	9.23	W 80. [see Notes.]
521	77 58 10.5	76.01	5	9.47	W 104, R, 2183, Gl 1008,
522	100 42 21.0	64.93	I	9.45	W114,RC2469,Si3360,Sp1336
523	58 37 17.6	72.01	5	9.42	W 118, Y 1819. [Y 1815.
524	106 18 42.6	82.05	I	9.39	Bn.
525	87 4 11.6	74.01	4	9.37	W 132.
r 26	**************************************	77:00	_		Bn.
526	106 29 45.2	73.99	5	9,31	W 152, R 1136, R <sub>2</sub> 2201.
527 528	74 5 47.5	77 <b>.</b> 95	I	9.53	Oe 2938, Y1841, St 1806.
529	87 46 500		4	9.50	W 180, 6yr 273, Bn, Gl 1024.
530		73°75 69°95	6	9.13	Oe $4693$ , $T_2$ , 12yr $360$ ,
				, ,	[RC 1195.]
53 I	58 20 3.5	74.01	4	0,00	D.
532	30 40 58.4	69.66	5	9.08	Bn.
533	66 42 16.0	75.95	2	9.06	W 231.
534 535	75 53 22.0	64.93	I 2	8·93 8·91	Bn.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			8.88	W 271, R, 2236, RC 1209.
536	47 52 1.8	71.78	4	8.83	17 2/1, 11, 22230, 110 1209.
537	96 34 57.0	79°49 66°27	4	8.82	δ' Tauri, see Notes.
538	1 13	71.18	3 5	8.78	W 303.
539 540	55 3 14.7	73.20	4	-8.77	RC <sub>2</sub> 491.
345	1 -9 44 /	1330	7	- , ,	- 17

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
541 542 543 544 545	8214 8264 8139 8242 8248	8·0 6· 6·9 8·2 7·0	4 <sup>h</sup> 16 <sup>m</sup> 4 16 4 16 4 17 4 18	18*·14 20° 38·64 51·51 17·79	75.45 72.02 78.50 69.45	2 5 2 5	+ 3**422 2*485 4*947 4*204 4*349
546 547 548 549 550	8300 8342 8344 8352 8389	6·5 7·2 6·9 7·0 8·0	4 19 4 19 4 19 4 20 4 20	1.76 25.85 50.97 33.93 40.82	78.00 72.62 69.55 76.99 72.01	3 5 5 3 2	3.958 3.159 3.464 3.703 2.919
551 552 553 554 555	8396 8458 8418 8495 8430	6·5 7·5 6·5 6·0 7·0	4 21 4 22 4 22 4 23 4 23	36.71 25.15 33.19 18.54 36.00	70°11 72°60 75°99 81°68 75°96	1 5 1 3 2	3.695 2.735 3.715 2.783 4.277
556 557 558 559 560	8468 8455 8509 8443	7.4 6.5 8.3 8.0 7.2	4 23 4 23 4 24 4 24 4 24	43.05 57.08 14. 43.09 59.	73°02 70°76 75°01	5 5 3	3.592 3.985 3.412 3.550 5.120
561 562 563 564 565	8566 8558 8547 8589 8618	6.5 5.0 8.0 6.0 7.0	4 25 4 25 4 25 4 26 4 27	15.35 29.05 55.44 22.37 16.99	64.93 73.73 79.02 72.56 82.05	1 4 2 4 1	2·545 3·064 3·618 2·998 2·793
566 567 568 569 570	8605 8615 8669 8667 8693	6.5 6.5 6.7 5.4 7.0	4 28 4 29 4 29 4 30 4 30	17.59 0.01 24.45 4.28 46.29	75.75 75.50 81.01 72.56 75.25	4 2 1 2 4	3.990 4.348 3.315 4.701 3.694
571 572 573 574 575	8715 8705 8726 8742 8775	5.7 6.0 6.3 6.5 6.0	4 3° 4 3° 4 31 4 3° 4 33	47'3° 53'36 45'79 28'42 5'79	80.91 69.96 71.06 75.21 75.98	5 5 4 1	3.088 3.533 3.649 3.781 3.335
576 577 578 579 580	8789 8804 8847 8806 8880	7.0 7.3 7.0 7.5 6.5	4 34 4 34 4 34 4 35 4 35	20.17 30.86 59.63 15.94 52.79	69.96 72.42 81.30 72.24 82.05	5 5 3 5 1	4.050 3.620 2.019 4.500 2.791
581 582 583 584 585	8825 8890 8863 8892	7.0 7.0 8.6 9.0 6.5	4 36 4 36 4 36 4 37 4 38	12.60 32.34 50. 21. 6.98	72.99 73.05 69.96	4 2 5	4.423 2.941 4.315 4.883 +4.126

No.	Mean N.P.D. 1875 0.	Epoch.	Obs.	Ann. Prec.	Authorities.
541	73° 39′ 45″ 4	75.45	2	-8"·77	W 317, Y 1872.
542	116 1 26′ 4	67.92	1	8·76	T 1523, Ar 931, Y 1873,
543	32 42 11′ 6	72.02	5	8·74	[St 1850.
544	46 48 39′ 1	79.65	3	8·65	W 343.
545	43 25 19′ 9	67.88	6	8·61	Oe 4806, RC 1225.
546	53 45 52.6	78·98	4	8.55	W 379.
547	85 54 46.9	72·62	5	8.52	W 377, Si,.
548	72 4 36.2	68·38	5	8.49	W 401, PM441, R 1197.
549	62 30 6.5	76·99	3	8.43	W 411.
550	97 9 58.8	67·98	3	8.42	W 409, Sp 1421.
551	62 52 25.9	65.09	2	8·35	W 436, Y 1906.
552	105 27 42.1	72.60	5	8·28	Oe 3097.
553	62 8 48.5	78.98	2	8·27	W 458, Y 1909.
554	103 19 31.4	81.75	4	8·21	W 467, Si, 349.
555	45 22 9.1	75.96	2	8·19	Oe 4890, RC 1248.
556 557 558 559 560	66 55 34.7 53 13 42.4 74 27 21.2 68 38 17.1 30 51 49.5	73°02 70°76 66°00 75°01 60°02	5 5 3 3 2	8·18 8·16 8·14 8·10 8·08	W 488, R 1223. R 1227, Ar 965, R <sub>2</sub> 2327. W 515, R 1230.
561	113 17 50°2	64.93	1	8.06	Oe 3134, Y 1927, St 1921.
562	90 18 51°1	73.73	4	8.04	W 509, T 1584, Si,, RC
563	65 59 14°6	79.02	2	8.00	W 530. [1258, RO <sub>3</sub> 516.
564	93 28 38°0	72.56	4	7.97	W 526, Si <sub>2</sub> , Bn, Gl 1097.
565	102 48 30°1	82.05	1	7.89	W 559, Si <sub>4</sub> 357, Sp 1460,
566	53 18 17.6	72.61	5	7·81	[Notes.] Oe 4980. W 600. [430, B 104. Ar 984, Oe 4987, RC 1276, 9yr W 642, PM 458.
567	44 1 20.6	75.48	2	7·76	
568	78 50 46.6	81.01	1	7·72	
569	37 10 20.5	69.04	4	7·67	
570	63 18 40.2	72.22	5	7·61	
571	89 15 23.8	81.61	3	7.61	W 639, 9yr 432.
572	69 34 6.7	69.96	5	7.60	W 650.
573	65 1 54.8	71.06	5	7.53	W 666.
574	60 16 30.1	75.51	4	7.47	W 680.
575	78 2 58.8	68.63	3	7.42	See <i>Notes</i> .
576 577 578 579 580	51 48 55 0 66 13 56 0 96 59 32 4 47 49 12 3 102 43 5 8	69.96 72.42 81.57 72.24 82.05	5 5 5 5		W 714, Y 1977 W 726, R 1248. W 741, Si <sub>2</sub> , Sp 1497. W 730, PM 464, RC 1298. W 765, Si <sub>3</sub> 429, Sp 1508.
581	42 45 34'I	72.99	4	7°17	Oe 5097, Bn.
582	95 59 47'4	73.05	2	7°14	W 779.
583	45 8 22'9	67.00	2	7°12	W 769, Oe 5116, see
584	34 38 2'9	68.01	1	7°08	Ar 1015. [Notes.
585	49 55 1'5	69.96	5	-7°01	W 801.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
586	8910	7.0	4 <sup>h</sup> 38 <sup>m</sup>	9.87	79.02	1	+ 3*.614
587	8901	7.0	4 38	49.27	72.71	3	4.337
588	8943	5.7	4 39	4.61	71.04	4	3.327
589	8932	7.5	4 39	24.82	73.69	3	4.001
590	8970	8.0	4 39	33.88	78.45	2	3.003
591	8969	8.1	4 39	43.58	72.02	4	3.138
592	8989	7.0	4 40	8.04	79.00	1	3.003
593	8966	6.3	4 40	26.43	71.28	2	3.769
594	9031	7.2	4 41	56.34	81.01	4	3.127
595	9037	7.0	4 42	10.93	73.2	4	3'146
596	8964	6.9	4 42	24.40	65.01	I	5.373
597	9019	8.0	4 42	26.07	70.18	5	4.041
598	9018	7.2	4 43	16.97	70.04	5	4.722
599	9083	8.3	4 43	38.95	73.96	I	3.148
600	9072	6.8	4 44	11.20	70.06	5	3.830
601	9119	7.8	4 45	5.41	68.00	1	3.287
602	9033	7.4	4 45	21'			5.797
603	9152	8.3	4 45	44.20	76.98	5	3.101
604	9136	6.2	4 46	1.40	76.81	2	3.613
605	9085	7.0	4 46	19.39	70.74	3	5.176
606	9172	7.2	4 47	23.69	71.37	3	3.864
607	9195	7.0	4 47	37.48	69.23	5	3.212
608	9188	6.8	4 47	47			3.817
609	9185	6.2	4 47	59.22	79.34	3	3,562
610	9223	6.2	4 48	38.96	65.02	2	3.649
611	9210	7.0	4 50	22.07	68.03	2	5.363
612	9260	7.1	4 50	55.22	69.85	5	4.500
613	9316	7.3	4 50	56.75	73.31	4	3.044
614	9354	6.	4 52	1.20	77.40	5	2.743
615	9332	7.2	4 52	6.80	72.42	5	3.728
616	9306	7.5	4 52	11.49	80.01	I	4.363
617		7.5	4 52	12.26	83.05	I	2.984
618	9362	8.5	4 52	48.74	82.05	I	3.557
619	9420	6.2	4 53	26.06	65.12	I	2.691
620	9385	7.2	4 53	59.64	75.00	2	3.411
621	9409	8.0	4 54	19.81	69.84	5	3.222
622	9434	7.0	4 54	21.94	74.20	2	3.031
623	9424	7.3	4 55	11.41	72.07	2	4.043
624	9491	7.0	4 55	55.53	79.02	I	2.820
625	9489	8.3	4 56	10.94	72.04	5	3'146
626	9493	7.5	4 57	5.00	76.61	5	3'715
627	9428	6.9	4 57	36.08	64.94	I	5.804
628	9504	6.2	4 57	40.03	70'12	5	4.000
629	9588	8.0	4 58	26.30	65.98	I	2.801
630	9581	6.0	4 58	56.60	78.10	2	+ 3.095
<u></u>							

No.	Mean N.P.D. 1875-0.	Epoch. Ob	s. Ann. Prec.	Authorities.
586 587 588 589	66° 36′ 16″·9 44 44 17·5 78 31 30·6 53 30 18·4	79°01 1 72°71 3 71°04 4 71°02 5	6·96 6·94 6·91	W 815, Ar 1022, Y 2006. W818, Ar 1023, Oe 5159, RC 1308 W818, R 1273, R2 2390, Gl 1154.
590	93 8 23.0	78.45 2	6.90	W 832, Si <sub>2</sub> , Sp 1529, Gl
591 592 593 594 595	86 57 43.7 93 10 56.6 60 59 16.4 87 30 39.5 86 38 1.9	72.02 4 79.00 1 75.04 3 81.01 4 73.52 4	6·85 6·82 6·70	W 846, Si <sub>2</sub> , Gl 1160. W 864. W 875, Si <sub>1</sub> . W 881, Si <sub>1</sub> .
596 597 598 599 600	28 43 53.0 52 27 34.9 37 22 22.8 86 32 11.6	60.08 2 69.47 6 70.04 5 73.96 1	6·66 6·59 6·56	Oe 5203, Bn. W 917. Oe 5233, RC 1326. W 914. W 960.
601 602 603 604 605	59 2 47.5 80 20 20.6 24 55 31.1 88 42 7.3 66 53 41.6 31 4 59.0	68.00 1 60.07 2 76.72 4 76.81 2	6.44	R, 2433. Oe 5250. W 972, Ar 1055, Bn, Y 12yr408. [2061, Gl 1183. Oe 5279.
606 607 608 609 610	58 2 59.2 70 43 8.2 59 39 9.9 54 2 3.8 65 36 34.9	76.01	6·25 6·23 6·20 6·20	W 1038, R 1313, R <sub>2</sub> 2446. W 1034. W 1036. W 1067, CA 115, T <sub>2</sub> , Y [2081, 9yr455, St2136.
611 612 613 614 615	29 6 26.0 48 19 14.4 91 15 49.7 104 25 38.1 62 51 56.2	69.85 73.31 80.40	6·00 5·95 4 5·95 5·86 5 5·85	R <sub>2</sub> 2469. W 1094, Gl 1206. 7yr 361, N7yr 630. R <sub>2</sub> 2480.
616 617 618 619 620	44 44 35'7 93 55 41'5 69 15 44'3 106 34 63 30 59'9	83.05	5.85 5.85 5.80 5.74 5.70	Oe 5382, Bn.  W 1170, R <sub>2</sub> 2488, 7yr Oe 3546, Bn. [362. W 1192, PM 502, R 1346, [R <sub>2</sub> 2495.
621 622 623 624 625	69 21 9'1 92 15 14'7 52 54 46'3 101 7 5'2 86 43 27'6	71.33 69.08 80.48	6 5.67 3 5.67 4 5.59 2 5.54 5 5.51	W 1208. W 1181, Si <sub>3</sub> , Sp 1608. W 1218. [Note. W 1230, Si <sub>3</sub> , Si <sub>3</sub> 470, W 1229, Sp 1620, Gl 1226
626 627 628 629 630	63 27 20.8 25 14 34.4 54 14 16.7 101 51 57.5 88 59 45.8	60.08 71.62 64.93	6 5'44 5'40 5 5'39 1 5'28 2 -5'28	W 1270. Oe 5475. W 1280. W 1304, Si <sub>3</sub> 479. W 1296, Si <sub>4</sub> , Gl 1239.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
631 632 633	95 <sup>6</sup> 7 9594 9598	7.0 7.9 7.8	4 <sup>h</sup> 59 <sup>m</sup> 10 <sup>s</sup> ·14 4 59 30·60 4 59 54·30	69·27 73·03 75·99	5 5 1	+ 3°.601 3.124 3.436
634 635	9647 9659	3.8 3.8	5 0 10.	79.06	1	2·536 2·767
636 637 638	9630 9683 9653	7.8 7.0 5.2	5 0 55.73 5 1 35.94 5 1 54.20	73.03 81.22	4 2 4	3°435 2°782 3°757
639 640	9699 9697	7.1 2.0	5 2 23.22 5 3 34.05	74.53 71.55	5 5	3.141 4.128
641 642 643	9664 9764 9743	6·5 7·0	5 4 11.98 5 5 1.86 5 5 22.43	69·13 82·01 76·24	1 2 5	5.521 3.012
644 645	9754 9769	7.0 7.5	5 5 22.43 5 5 54. 5 6 14.80	71.80	4	4°447 4°467 3°831
646 647	9802	6·8 6·0	5 7 2·10 5 9 7·60	72.20 68.00	2 I	3.114
648 649 650	9849 982 <b>7</b> 9854	9.0 6.2 7.8	5 9 9.94 5 9 21.30 5 9 53.81	73.96 71.51 21.01	1 5 1	3.451 3.421
651 652	9831 9886	7·3 7·0 7·8	5 9 55.54 5 10 19.68	71.32	4 2	4.038 2.808
653 654 655	9864 9890 9973	7.5 6.5	5 10 57.25 5 11 45.30 5 13 15.50	78.52 70.49 80.01	4 4 2	3.979 4.041 3.037
656 657	9971 9955	8·0 7·7	5 13 17.77 5 13 47.79	73.70	5	3°128 4°027
658 659 660	10023 10028 10011	7°0 7'3 6'8	5 14 18.03 5 14 43.88 5 15 25.99	65·12 79·06 71·01	5	2.047 3.161 4.032
661 662 663	10041	6·8 8·5	5 16 20·30 5 16 54·48	70°55 75°77	4 4 1	4.028 3.983
664 665	10107 10145 10165	7.2 2.0 8.0	5 17 44.73 5 18 15. 5 18 45.37	65.13	1	3 562 3.115 3.002
666 667 668	10179	6·0 7·1	5 19 52.63 5 19 54.97	64.97 75.05	I I	3.496 3.528
669 670	10168 10210 10209	6·7 7·7 6·6	5 20 7.98 5 20 52.73 5 21 21.35	71.31 76.22	4 4 5	3.622 4.002
671 672	10223	7.7 7.0	5 21 32·26 5 22 42·64	74.23 65.12	4	3.936 2.993
673 674 675	10293 10271 10339	7.5 7.8 7.4	5 22 46 12 5 22 57 5 23 43 61	75.06	4 I	3.451 4.055 + 3.167

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
631	67° 39′ 38″·o	70.62	7	-5".26	W 1325, R, 2531.
632	86 23 1.0	73.03	5	5.53	W 1315, Si <sub>1</sub> .
633	74 13 59'7	75.99	1	5.50	W 1350, R 1385, R22540.
634	112 32 26.0	68.01	ī	5.12	See Notes.
635	103 17 32.0	79.06	ī	2,15	W 1361, R22546, Si4399.
033	103 17 32 9	1900	1	3 12	11 1301,11,2340,0143991
636	74 18 41'4	73'04	5	2.11	W 1387, R 1390.
637	102 39 18.5	81.22	2	5.06	W 1379, Si, 486, Y 2167.
638	62 7 48.7	67.57	6	5.03	W1421, PM 521, R22549.
639	86 56 39 <sup>.</sup> 6	74.53	5	4.99	Sp 1655.
640	20 3 10,0	69.36	6	4.89	W 5.
641	30 44 43.3	74.72	3	4.84	Oe 5599.
642	92 38 51.3	82'01	2	4.76	W 57, Si, Gl 1266.
643	53 7 5.6	76.24	5	4.74	W 72.
644	. 42 58 26.4	60.06	2	4.69	Oe 5637.
645	59 45 0.0	71.80	4	4.66	W 111, Y 2192.
13	37 43	,	"	, , ,	
646	88 10 57'1	72.20	2 .	4.29	[Gl 1283.
647	78 48 5°0	68.00	1	4.42	W 166, T 1880, Ar 1145,
648	93 30 37'4	81.48	2	4'41	W 175, R 1401.
649	61 14 8.3	72.07	4	4.40	W 207.
650	73 47 18.6	73.96	1	4.35	W 236.
651	53 30 22.2	71.68	5	4'34	
652	101 28 38.1	69.01	2	4.31	W 208, Si <sub>3</sub> 503.
653	55 14 41.7	78.25	4	4.36	11 200, 21, 303.
654		70.49	4	4.10	
655	23 27 29'1 23 27 29'1	80.01	2	4.06	W 261, Si <sub>2</sub> .
6-6	0				577 (T)
656	87 36 51.1	73'40	3	4.06	W 259, T 1917.
657	53 55 36.1	71.86	5	4.02	W ( G'
658	95 29			3.97	W 296, Si <sub>2</sub> . [1733, Gl 1305.
659	86 6 55.4	79.06	I	3'94	W 303, Rs 2580, 12yr 444, Sp
660	53 43 23.5	69.19	6	3.88	W 385, R1422.
661	53 55 8.0	70.22	4	3.80	W 406.
662	55 15 39.5	72.71	6	3.75	PM 563.
663	69 31 58.4	70.22	2	3.68	W 462.
664	88 16 11.1	68.00	1	3.63	See Notes.
655	92 55 48.9	65.13	I	3.23	W 405, Si <sub>2</sub> , Sp 1767, Gl
666	72 8 49.7	64.97	1	3*49	T 1970, Ar 1188, 7yr 399, N7yr
667	83 14 30.3	75.02	I	3.49	W 431, Gl 1328. [692, Y 2258.
668	55 24 37'2	71.31	4	3.47	W 525.
669	67 21 49.2	77.64	5	3.41	W 558, R 1435, R, 2610.
670	54 43 44.3	69.67	5	3'37	
671	56 45 32.6	73'43	5	3.32	
672	93 24	, 5 45	,	3.5	W 520, Si <sub>2</sub> .
673	73 57 3'2	70.82	5	3.52	W 625.
674	53 19 11'5	60.06	2	3'22	
675	85 53 39.6	75.06	I	-3.16	W 543, Si,, Gl 1345.
"	0 00 07				

676	No.	Lalande.	Mag.	Mean R.A. 1875	0. Epoch.	Obs.	Ann. Prec.
677         10394         7'0         5         25         ±14         73'90         3         2'83'           678         10400         7'5         5         25         29'15         71'59         4         2'99           679         10437         6'0         5         26         22'12         66'12         1         3'03           680         10408         7'3         5         26         54'90         69'97         1         4'09           681         10456         7'4         5         27         10'75         80'53         2         3'04           682         10496         7'7         5         28         5'35         74'08         2         3'07           683         10492         6'5         5         28         19'57         70'69         5         3'37           684         10518         7'5         5         28         35'55         81'01         1         2'82           685         10489         6'6         5         28         45'48         71'22         4         3'71           686         10540         5'5         5         29         13'19         68'00 <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td>			1			1	
077         10394         7'0         5         25         2914         73'90         3         2'83'           678         10400         7'5         5         25         29'15         71'59         4         2'99'           679         10437         6'0         5         26         22'12         66'12         1         3'03'           680         10408         7'3         5         26         54'90         69'97         1         4'09'           681         10456         7'4         5         27         10'75         80'53         2         3'04'           682         10496         7'7         5         28         5'35         74'08         2         3'07'           683         10492         6'5         5         28         19'57         70'69         5         3'37           684         10518         7'5         5         28         35'55         81'01         1         2'82'           685         10489         6'6         5         29         13'19         68'00         1         2'95'           685         10540         5'5         5         29         13'19	676	10324	7.0	5h 24m 278.2	71.66	5	+ 48.040
678         10400         7'5         5         25         29'15         71'59         4         2'99           679         10437         6'0         5         26         22'12         66'12         1         3'03           680         10498         7'3         5         26         54'90         69'97         1         4'09           681         10456         7'4         5         27         10'75         80'53         2         3'04           682         10492         6'5         5         28         19'57         70'69         5         3'37           684         10518         7'5         5         28         35'55         81'01         1         2'82           685         10489         6'6         5         28         45'48         71'22         4         3'71           686         10540         5'5         5         29         13'19         68'00         1         2'95'           687         10525         6'7         5         29         20'71         79'06         1         3'74           688         10505         7'0         5         29         50'72         70'82	677			3 24 27 3			
679         10437         600         5         26         22*12         66*12         1         3*03           680         10408         7'3         5         26         54*90         69*97         1         4*09           681         10408         7'4         5         27         10*75         80*53         2         3*04           682         10496         7'7         5         28         5'35         74*08         2         3*07           683         10492         6'5         5         28         19*57         70*69         5         3*37           684         10518         7'5         5         28         35*55         81*01         1         2*82           685         10489         6'6         5         28         45*48         71*22         4         3*71           686         10540         5'5         5         29         13*19         68*00         1         2*95*           687         10525         6'7         5         29         20*71         70*62         4         4*25*           689         10548         3*1         5         30         10*56         80*05	0//			5 25 <b>4</b> 71			
679         10437         6'0         5         26         22*12         66'12         1         3'03           680         10408         7'3         5         26         54'90         69'97         1         4'09           681         10408         7'4         5         27         10'75         80'53         2         3'04           682         10496         7'7         5         28         5'35         74'08         2         3'07           683         10492         6'5         5         28         19'57         70'69         5         3'37           684         10518         7'5         5         28         35'55         81'01         1         2'82           685         10489         6'6         5         28         45'48         71'22         4         3'71           686         10540         5'5         5         29         13'19         68'00         1         2'95'           687         10525         6'7         5         29         20'71         70'082         4         4'25           689         10548         3'1         5         30         10'56         80'05		10400		5 25 29.1		4	
680         10468         7'3         5         26         54'90         69'97         1         4'09           681         10456         7'4         5         27         10'75         80'53         2         3'04           682         10496         7'7         5         28         5'35         74'08         2         3'07           683         10492         6'5         5         28         19'57         70'69         5         3'37           684         10518         7'5         5         28         35'55         81'01         1         2'82           685         10489         6'6         5         28         45'48         71'22         4         3'71           686         10540         5'5         5         29         13'19         68'00         1         2'95'           687         10525         6'7         5         29         20'71         79'06         1         3'74'           688         10505         6'7         5         29         50'71         70'82         4         4'25           689         10548         3'1         5         30         10'66         80'05	679	10437	6.0	5 26 22'1	2 66.13	1	3.033
681         10456         7'4         5         27         10°75         80°53         2         3°04           682         10496         7'7         5         28         5°35         74°08         2         3°07           683         10492         6°5         5         28         19°57         70°69         5         3°37           684         10518         7°5         5         28         35°55         81°01         1         2°82           685         10489         6°6         5         28         45′48         71°22         4         3°71           686         10540         5°5         5         29         13°19         68°00         1         2°95           687         10525         6°7         5         29         20°71         79°06         1         3°74           688         10505         7°0         5         29         50°72         70°82         4         4°25           689         10548         3°1         5         30         10°6         80°05         2         3°58           690         8°5         31         3°         7°27         5         3			7'3		69.97	1	4.099
682         10496         7.7         5         28         5:35         74'08         2         3:07'683         10492         6:5         5         28         19:57         70:69         5         3:37'684         10518         7:5         5         28         35'55         81'01         1         2:82         685         10489         6:6         5         28         45'48         71'22         4         3:71         3:74         686         10549         5:5         5         29         13'19         68'00         1         2'95'6         687         10525         6'7         5         29         20'71         79'06         1         3'74         688         10505         7'0         5         29         50'72         70'82         4         4'25         4'25         689         10548         3'1         5         30 10'56         80'05         2         3'58         690         8'5         5         31         3'         3'27'         5         3'60'         4'25         4         4'25         4'25         4         4'25         4'25         4         4'25         4'25         4         4'25         4'25         4         4'25         4'25 <t< td=""><td>60-</td><td></td><td></td><td></td><td>0-17-</td><td></td><td></td></t<>	60-				0-17-		
683         10492         6.5         5         28         19.57         70.69         5         3.37           684         10518         7.5         5         28         35.55         81.01         1         2.82           685         10489         6.6         5         28         45.48         71.22         4         3.71           686         10540         5.5         5         29         13.19         68.00         1         2.95           687         10525         6.7         5         29         20.71         79.06         1         3.74           688         10505         70         5         29         50.72         70.82         4         4.25           689         10548         3.1         5         30         10.56         80.05         2         3.58           690         8.5         5         31         3         60.76         80.05         2         3.58           691         10607         70         5         31         56.63         71.27         5         3.60           692         10615         6.4         5         32         30.61         72.94				5 27 10.7		1	
683         10492         6.5         5         28         19.57         70.69         5         3.37           684         10518         7.5         5         28         35.55         81.01         1         2.82           685         10489         6.6         5         28         45.48         71.22         4         3.71.           686         10540         5.5         5         29         13.19         68.00         1         2.95.           687         10525         6.7         5         29         20.71         79.06         1         3.74           688         10505         7.0         5         29         50.72         70.82         4         4.25           689         10548         3.1         5         30         10.56         80.05         2         3.58           690         8.5         5         31         3.         3.27         5         3.60           691         10607         7.0         5         31         56.63         71.27         5         3.60           692         10615         6.4         5         32         30.61         72.94         1		10496					3.070
684         10518         7'5         5         28         35'55         81'01         1         2'82           685         10489         6'6         5         28         45'48         71'22         4         3'71           686         10540         5'5         5         29         13'19         68'00         1         2'95'           687         10525         6'7         5         29         20'71         79'06         1         3'74'           688         10505         7'0         5         29         50'72         70'82         4         4'25           689         10548         3'1         5         30'10'56         80'05         2         3'58'           690         8'5         5         31         3''12'7         5         3'60'         3'58'           691         10607         7'0         5         31         56'63         71'27         5         3'60'           692         10615         6'4         5         32         30'61         72'94         1         3'87'           693         10636         7'8         5         32         46'24         73'58         4	683	10492	6.2	5 28 19.5	70.69	1 5	3.371
685         10489         6.6         5 28 45:48         71:22         4         3:71.           686         10540         5:5         5 29 13:19         68:00         1         2:95:687           687         10525         6:7         5 29 20:71         79:06         1         3:74.           688         10505         7:0         5 29 50:72         70:82         4         4:25.           689         10548         3:1         5 30 10:56         80:05         2         3:58.           690         8:5         5 31         3:0         10:26         80:05         2         3:58.           691         10607         7:0         5 31         56:63         71:27         5         3:60.           692         10615         6:4         5 32         30:61         72:94         1         3:87.           693         10636         7:8         5 32         59:17         68:98         5         3:96.           694         10630         7:9         5 32         59:17         68:98         5         3:96.           695         10682         7:8         5 34         21:52         71:04         2         3:00.	684	10518	7.5	5 28 35.5		I	2.825
686         10540         5'5         5 29 13'19         68'00         1         2'95'           687         10525         6'7         5 29 20'71         79'06         1         3'74           688         10505         7'0         5 29 50'72         70'82         4         4'25'           689         10548         3'1         5 30 10'56         80'05         2         3'58'           690         8'5         5 31         3'         3'27'         5         3'60'           691         10607         7'0         5 31         56'63         71'27         5         3'60'           692         10615         6'4         5 32         30'61         72'94         1         3'87'           693         10636         7'8         5 32         46'24         73'58         4         3'54'           694         10630         7'9         5 32         59'17         68'98         5         3'96'           695         10682         7'8         5 33         20'71         82'05         1         3'10'           696         7'0         5 34         21'52         71'04         2         3'00'           697 <td>685</td> <td></td> <td>6.6</td> <td></td> <td>2</td> <td>4</td> <td>3.714</td>	685		6.6		2	4	3.714
687         10525         6.7         5         29         20.71         79.06         1         3.74.           688         10505         7'0         5         29         50.72         70.82         4         4'25.           689         10548         3'1         5         30         10.56         80.05         2         3'58.           690         8'5         5         31         3'         3'27'         5         3'58.           691         10607         7'0         5         31         56'63         71'27         5         3'60'         692         10615         6'4         5         32         30'61         72'94         1         3'87'         693         10636         7'8         5         32         40'24         73'8         4         3'54'         694         10630         7'8         5         32         29'17         68'98         5         3'96'         695         10682         7'8         5         33         20'71         82'05         1         3'10         3'10         696         7'0         5         34         21'52         71'04         2         3'00         697         1070         5	606						
688         10505         7.0         5         29         50.72         70.82         4         4'25.86           689         10548         3'1         5         30         10'56         80'05         2         3'58.35.86           690         8'5         5         31         3'0         3'27.86         3'27.86           691         10607         7'0         5         31         56'63         71'27         5         3'60'60           692         10615         6'4         5         32         30'61         72'94         1         3'87'60         3'8'7'60         3'8'7'60         4         3'54'40         3'54'40         3'94'40         3'94'40         3'94'40         3'94'40         3'94'40         3'94'40         3'94'40         3'94'40         3'10'40'40         3'10'40'40         3'10'40'40         3'10'40'40<			2.2	2 29 13.1	· .		
688         10505         7'0         5         29         50'72         70'82         4         4'25'           689         10548         3'1         5         30         10'56         80'05         2         3'58'           690         8'5         5         31         3'         3'27'         5         3'58'           691         10607         7'0         5         31         56'63         71'27         5         3'60'           692         10615         6'4         5         32         30'61         72'94         1         3'87'           693         10636         7'9         5         32         59'17         68'98         5         3'96'           695         10682         7'8         5         33         20'71         82'05         1         3'10'           696         7'0         5         34         21'52         71'04         2         3'00'           697         10709         8'2         5         34         26'49         71'10         3         3'62'           698         10703         7'1         5         34         44'87         72'06         2         3'94		10525		5 29 20.7		I	
689         10548         3'1         5         30         10'56         80'05         2         3'58'           690         8'5         5         31         3'         3'27'           691         10607         7'0         5         31         56'63         71'27         5         3'60'           692         10615         6'4         5         32         30'61         72'94         1         3'87'           693         10636         7'8         5         32         46'24         73'58         4         3'54'           694         10630         7'9         5         32         59'17         68'98         5         3'96'           695         10682         7'8         5         33         20'71         82'05         1         3'10'           696         7'0         5         34         21'52         71'04         2         3'00'           697         10709         82'2         5         34         26'49         71'04         2         3'02'           698         10703         7'1         5         34         44'87         72'06         2         3'94'           699	688	10505	7.0	5 29 50.7	2 70.82	4	4.254
690         8.5         5 31 3.         3.27           691         10607         70         5 31 56.63         71.27         5         3.60           692         10615         6.4         5 32 30.61         72.94         1         3.87           693         10636         7.8         5 32 46.24         73.58         4         3.54           694         10630         7.9         5 32 59.17         68.98         5         3.96           695         10682         7.8         5 33 20.71         82.05         1         3.10           696         7.0         5 34 21.52         71.04         2         3.00           697         10709         8.2         5 34 26.49         71.10         3         3.62           698         10703         7.1         5 34 44.87         72.06         2         3.94           699         10776         7.0         5 35 24.22         80.09         1         3.00           700         10795         5.7         5 36 0.57         68.01         1         3.10           701         10687         7.3         5 36 11.47         70.65         4         5.26           702<	680		3,1	5 30 10.2		2	3.283
691         10607         7.0         5         31         56'63         71'27         5         3'60'60'60'60'60'60'60'60'60'60'60'60'60'		54-	8.5	5 35 20 3			
692         10615         6·4         5 32 30·61         72·94         1         3'87;           693         10636         7'8         5 32 46·24         73·58         4         3'54;           694         10630         7'9         5 32 59·17         68·98         5         3'96;           695         10682         7'8         5 33 20·71         82·05         1         3'10;           696         7'0         5 34 21·52         71·04         2         3'00;           697         10709         8·2         5 34 26·49         71·10         3 3·62;           698         10703         7'1         5 34 26·49         71·10         3 3·62;           699         10776         7·0         5 35 24·22         80·09         1         3·03;           700         10795         5·7         5 36 0·57         68·01         1         3'10;           701         10687         7'3         5 36 11·47         70·65         4         5'26;           702         10826         7'0         5 36 49·96         65'12         1         2·912	090		0.5	5 31 3			3-19
692         10615         6·4         5 32 30·61         72·94         1         3'87;           693         10636         7'8         5 32 46·24         73·58         4         3'54;           694         10630         7'9         5 32 59·17         68·98         5         3'96;           695         10682         7'8         5 33 20·71         82·05         1         3'10;           696         7'0         5 34 21·52         71·04         2         3'00;           697         10709         8·2         5 34 26·49         71·10         3 3·62;           698         10703         7'1         5 34 26·49         71·10         3 3·62;           699         10776         7·0         5 35 24·22         80·09         1         3·03;           700         10795         5·7         5 36 0·57         68·01         1         3'10;           701         10687         7'3         5 36 11·47         70·65         4         5'26;           702         10826         7'0         5 36 49·96         65'12         1         2·912	691	10607	7.0	5 31 56.6	3 71.27	5	3.600
693         10636         7.8         5         32         46.24         73.58         4         3.54           694         10630         7.9         5         32         59.17         68.98         5         3.96           695         10682         7.8         5         33         20.71         82.05         1         3.10           696         7.0         5         34         21.52         71.04         2         3.00           697         10709         8.2         5         34         26.49         71.10         3         3.62           698         10703         7.1         5         34         44.87         72.06         2         3.94           699         10776         7.0         5         35         24.22         80.09         1         3.00           700         10795         5.7         5         36         0.57         68.01         1         3.10           701         10687         7.3         5         36         11.47         70.65         4         5.26           702         10826         7.0         5         36         49.96         65.12         1		10615					2.870
694         10630         7'9         5         32         59'17         68'98         5         3'90'           695         10682         7'8         5         33         20'71         82'05         1         3'10'           696         7'0         5         34         21'52         71'04         2         3'00'           697         10709         8'2         5         34         26'49         71'10         3         3'62'           698         10703         7'1         5         34         44'87         72'06         2         3'94'           699         10776         7'0         5         35         24'22         80'09         1         3'00'           700         10795         5'7         5         36         0'57         68'01         1         3'10'           701         10687         7'3         5         36         11'47         70'65         4         5'26'           702         10826         7'0         5         36         49'96         65'12         1         2'91'				5 32 360		1	
695         10682         7.8         5         33         20.71         82.05         1         3.10           696         7.0         5         34         21.52         71.04         2         3.00           697         10709         8.2         5         34         26.49         71.10         3         3.62           698         10703         7.1         5         34         44.87         72.06         2         3.94           699         10776         7.0         5         35         24.22         80.09         1         3.00           700         10795         5.7         5         36         0.57         68.01         1         3.10           701         10687         7.3         5         36         11.47         70.65         4         5.26           702         10826         7.0         5         36         49.96         65.12         1         2.912				5 32 40 2			
695         10682         7.8         5         33         20.71         82.05         1         3.10           696         7.0         5         34         21.52         71.04         2         3.00           697         10709         8.2         5         34         26.49         71.10         3         3.62           698         10703         7.1         5         34         44.87         72.06         2         3.94           699         10776         7.0         5         35         24.22         80.09         1         3.00           700         10795         5.7         5         36         0.57         68.01         1         3.10           701         10687         7.3         5         36         11.47         70.65         4         5.26           702         10826         7.0         5         36         49.96         65.12         1         2.912			7.9	5 32 59.1			
697         10709         8·2         5 34 26·49         71·10         3 3·62           698         10703         7·1         5 34 44·87         72·06         2 3'94;           699         10776         7·0         5 35 24·22         80·09         1 3·00;           700         10795         5·7         5 36 0·57         68·01         1 3·10;           701         10687         7·3         5 36 11·47         70·65         4 5·26;           702         10826         7·0         5 36 49·96         65·12         1 2·912	695	10682	7.8	5 33 20.7	1 82.02	I	3.102
697         10709         8·2         5 34 26·49         71·10         3 3·62           698         10703         7·1         5 34 44·87         72·06         2 3'94;           699         10776         7·0         5 35 24·22         80·09         1 3·00;           700         10795         5·7         5 36 0·57         68·01         1 3·10;           701         10687         7·3         5 36 11·47         70·65         4 5·26;           702         10826         7·0         5 36 49·96         65·12         1 2·912	606		7'0	E 24 21.E	2 71.04	2	3.002
698         10703         7'1         5         34         44'87         72'06         2         3'94'           699         10776         7'0         5         35         24'22         80'09         1         3'00'           700         10795         5'7         5         36         0'57         68'01         1         3'10'           701         10687         7'3         5         36         11'47         70'65         4         5'26'           702         10826         7'0         5         36         49'96         65'12         1         2'912'		10700				1	
699         10776         7.0         5 35 24.22         80.09         1         3.00           700         10795         5.7         5 36 0.57         68.01         1         3.10           701         10687         7.3         5 36 11.47         70.65         4         5.26           702         10826         7.0         5 36 49.96         65.12         1         2.91							_
700 10795 5.7 5 36 0.57 68 01 1 3.101 701 10687 7.3 5 36 11.47 70.65 4 5.262 702 10826 7.0 5 36 49.96 65.12 1 2.912						1 1	
701 10687 7.3 5 36 11.47 70.65 4 5.262 702 10826 7.0 5 36 49.96 65.12 1 2.912		10776	7.0	5 35 24'2		1	
702   10826   7.0   5 36 49.96   65.12   1   2.912	700	10795	5.7	5 36 0.2	7 68.01	I	3.102
702   10826   7.0   5 36 49.96   65.12   1   2.912	701	10687	7:2	E 26 TI'A	7 70:65	4	5.262
				5 36 114			
1 702   10722   0'f   f 27 10'02   00'00   1   5'050	. ,			5 30 49 9	1		
	703		6.2	5 37 19.0			
704   10805   6.7   5 37 24.05   73.82   4   3.880	704	10805	6.4	5 37 24.0	5 73.82	4	3.880
705   10842   70   5 37 59.44   73.25   7   3.375	705	10842	7.0		4 73°25	7	3'375
706 10881 7.0 5 38 29.10 80.65 2 2.910	706	10881	7:0	F 28 20:	80.65	,	2.010
						1	6.440
					09.13	1	
				5 39 34			3.448
709 10871 6.5 5 39 34.78 70.84 5 4.008	709	10871	6.2	5 39 34.7	8   70.84	5	4.008
710 10918 6.1 2 40 8. 3.49.	710	10918	6.1	5 40 8.			3.497
711 10908 7.0 5 40 43.84 71.68 3 4.139	711	10008	7.0	E 40 42.8	71.68	2	4'139
	. 1			5 41 1.4	0 79.37	3	3.364
	713		7'9	5 41 4			4.138
714 10968 5.3 5 41 20.76 70.87 5 3.686	714	10968	5.3	5 41 20'7	6   70.87	5	3.680
715 10975 7.0 5 41 47.28 71.08 2 3.766				5 41 47.2			3.766
716 11060 8. 5 42 58.25 65.52 2 2.733	716	11060	8.	F 42 F8:2	65.52	2	2'731
					3 03 32	_	3.779
						,	
	- 1					3	4'133
1							2.727
720 11066 6.8 5 44 57.62 70.02 5 +4.088	720	11066	6.8		2 70.02	5	+ 4.088
						-	

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities,
676 677 678 679 680	53° 46′ 23″ 9 100 10 3 2 93 18 40 9 91 41 2 7 52 11 4 1	71.66 75.95 71.59 66.12 65.02	5 4 4 1 2	-3"·10 3.05 3.01 2.03 2.88	W 596, Si <sub>2</sub> , Si <sub>3</sub> 528, Note. W 601. W 619, Si <sub>2</sub> , L <sub>1</sub> 722. W 736.
681 682 683 684 685	91 14 47.7 90 5 56.8 79 50 42.0 100 35 17.3 64 8 39.2	80.53 74.08 70.69 81.48 71.22	2 2 5 2 4	2·86 2·78 2·76 2·74 2·72	12yr468, 7yr412, L, 728. W 658, 6yr 393. R, 2648. W 686, Si, Si, 536. W 816.
686 687 688 689	94 55 19.8 63 9 23.2 48 14 15.1 68 56 10.2 81 7 40.7	68.00 79.06 70.82 76.00 61.55	1 1 4 3 2	2.69 2.67 2.63 2.61 2.53	T 2049, Ar 1241, Si <sub>2</sub> , St W 842, Gl 1364. [2489. ζ Tauri, see <i>Notes</i> . W 740, Ar 1253.
691 692 693 694 695	68 18 35°0 58 42 47°9 70 23 26°9 56 9 0°0 88 34 44°8	71.27 72.94 73.58 65.98 82.05	5 1 4 5 1	2·45 2·40 2·36 2·32	W 953. W 962. W 989, R 1505. W 817,Sp 1870,Gl 1383.
696 697 698 699 700	92 53 36.5 67 30 53.1 56 44 55.1 92 57 45.8 88 35 15.4	75°01 70°33 72°06 80°09 68°01	2 4 2 I I	2.10 2.10	W 844, Si <sub>2</sub> . R 1517, Ar 1268. W 1066, PM 621. W 881. W 892, T2112, R, Ar 1275,
701 702 703 704 705	31 16 12·8 96 51 27 14 31·8 58 43 50·9 77 10 1·8	69.01 64.57 73.82 73.25	6 2 4 7	2.08 2.02 1.98 1.97	[Si,, Sp 1891] Oe 6147. W 921, Si,, Sp 1897. Oe 6165. W 1180, Y 2371. W 939, Sp 1905, Gl 1407.
706 707 708 709 710	96 55 13.9 21 34 8.3 74 13 43.5 54 53 23.5 72 19 11.0	81.99 69.13 66.05 69.04 67.50	1 1 3 6 2	1.88 1.80 1.79 1.78	W 964, Si <sub>2</sub> .  See <i>Notes</i> .  W 1260, Y 2377.  Ar1290, R <sub>2</sub> 2730,6yr412.
711 712 713 714 715	51 18 21.7 77 37 43.0 51 20 50.8 65 28 35.5 62 29 26.5	72.58 79.37 69.87 70.87 71.08	2 3 1 5 2	1.68 1.66 1.63 1.63	B 146. W 1296, Ar 1294, Y 2385. R, 2739, Sp 1926. W 1301, Ar 1298, Y 2389. R 1572, 129r 493,69r 414, W 1341, R 1575. [99r 551
716 717 718 719 720	104 21 62 4 197 51 28 33.2 104 31 21.3 52 41 47.8	67.50 68.41 76.65 68.03	2 5 7 5	1.49 1.48 1.43 1.41 -1.31	L <sub>5</sub> 126. Ar 1309, Gl 1438. W 1387, PM 646. W 1100, Si <sub>4</sub> 477. W 1436, R 1597, R <sub>2</sub> 2765.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
721 722 723 724 725	11088 11098 11123 11127 11113	6.0 7.8 7.5 7.3 6.5	5 <sup>h</sup> 44 <sup>m</sup> 5 45 5 46 5 47 5 47	59 <sup>5</sup> ·23 54·47 13·48 20·68 28·04	74 <sup>.8</sup> 2 76 <sup>.</sup> 55 70 <sup>.</sup> 04 72 <sup>.</sup> 61 71 <sup>.</sup> 10	4 2 2 2 1	+ 3*.553 3.673 3.351 4.075 4.607
726 727 728 729 730	11153 11195 11158 11196 11217	6·3 7·5 7·3 7·0 6·5	5 47 5 47 5 48 5 48 5 49	32° 56°01 18°99 54°88 36°07	65.12 75.05 76.30 75.06	1 3 4 1	3.551 2.682 4.126 3.403 3.296
731 732 733 734 735	11211 11239 11253 11247 11293	7.5 7.5 7.3 6.5 7.2	5 49 5 50 5 51 5 52 5 52	37.50 24.09 8.47 6.76 9.40	71.88 72.61 69.72 71.83 79.56	6 2 6 4 4	3.464 3.406 3.717 4.606 3.601
736 737 738 739 740	11326 11340 11382 11339 11367	6·8 7·5 6·0 6·4 7·1	5 53 5 53 5 53 5 54 5 54	9. 15.78 48.17 17.04 26.23	75°37 73°61 69°06 69°65	3 4 1 5	3.770 3.371 3.000 4.315 3.926
741 742 743 744 745	11374 11411 11447 11492 11458	6·3 6· 6· 6· 6·	5 54 5 56 5 56 5 56 5 57	43 <sup>2</sup> 7 2 <sup>2</sup> 8 29 <sup>5</sup> 52 <sup>6</sup> 8 18 <sup>6</sup> 8	75.06 73.04 82.04 71.87	5 1 5	3.928 4.138 3.562 2.726 3.960
746 747 748 749 750	11471 11537 11493 11598 11528	6·1 7·5 6·8 5· 7·4	5 57 5 57 5 58 5 59 5 59	24	72.69 65.12 69.42	5 1 3	4.022 2.499 4.305 2.677 4.046
75 <sup>1</sup> 75 <sup>2</sup> 753 754 755	11637 11559 11700 11688 11635	6·0 7·4 6·0 8·0 6·9	6 0 6 2 6 2 6 2	38.88 15. 26.54	68.06 65.06 71.62 69.97	1 1 4 1	2.716 4.326 2.608 3.131 4.327
756 757 758 759 <b>760</b>	11705 11706 11694 11730 11710	7.5 6.5 7.5 8.5 6.0	6 2 6 3 6 3 6 4	44.89 3.67 28.38	82.03	1 1 7 2 6	2.691 2.886 3.454 2.939 3.931
761 762 763 764 765	11759 11736 11821 11767 11857	5.8 7.0 7.5 8.0 7.5	6 2 6 6 6 6	59.77	71.40	4 1 3 1	3.459 4.086 2.695 4.439 + 2.957

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Anthorities
721 722 723	70° 10′ 0″.0 65 44 38.8 78 12 47.3	76·24 76·55 70·04 68·45	5 2 2	-1":31 1:23 1:11	W 1476, 12yr 510. W 1506.
724 725	53 5 13.9	66.77	3	1.10	Oe 6326, Bn.
726 727	70 16 35.7 106 17	68.00	I	1.02	T 2201, Ar 1335, N 7yr Bn.[765,9yr564, Gl 1459.
728 729 730	20 30 40.1 21 44 52.1 21 44 52.1	71.31 77.43 75.06	4 5 1	0.81 0.84	W 1206, Gl 1465, Note. W 1226, Si,, Gl 1467.
73 <sup>1</sup> 73 <sup>2</sup> 733	73 39 55 <sup>1</sup> 75 57 <sup>28</sup> <sup>5</sup> 64 14 13 <sup>8</sup>	70 <sup>.</sup> 89 72 <sup>.</sup> 61 69 <sup>.</sup> 72	6 2 6	0.84 0.48	W 1591. W 1247, Gl 1469.
734 735	68 24 28.9	79.26	4 4	o.69	R 1642.
736 737 738	62 26 10·3 77 23 54·2 93 4 51·3	68.00 77.02 70.82	1 4 3	o:60 o:59 o:54	W 1705, T 2244, R 1650. W 1323, Gl 1481. W 1350, Si.
739 740	47 5 57 24 47.6	69.65	5	o.20 o.40	CA 141, RC 1615, RC2 663,9yr W 1751. \[ \begin{array}{c} 575, \text{Gl 1486.} \end{array}
741 742 743 744 745	57 21 36·3 51 25 26·8 69 51 37·4 104 29 54·0 56 23 47·5	75.06 70.88 62.50 82.04 71.87	1 6 4 1	0.46 0.35 0.31 0.27 0.23	W 1758, Note. W 1794, R, 2808, RC See Notes. [1622.]
746 747 748 749 750	54 35 45 <sup>2</sup> 113 13 47 19 26 <sup>5</sup> 106 28 39 <sup>7</sup> 53 55 17 <sup>4</sup>	75·88 69·62 68·05 64·57	5 5 1 2	0.02 0.10 0.10	Y 2507. Oe 4580. W 1889. T 2295, 9yr 582, St 2768. Y 2519.
751 752 753 754 755	104 55 33.6 46 50 34.8 109 9 10.4 87 28 55.9 46 48 52.3	66·56 60·05 68·02 71·62 69·97	2 I 2 4 I	+0.04 0.06 0.50 0.51 0.51	See Notes. W 1948. See Notes. W 1586, Si, Bn. W 2025.
756 757 758 759 760	105 53 97 55 9·6 74 4 19·4 95 41 31·7 57 16 52·2	82.09 68.50 82.02 71.50	7 2 5	0°22 0°24 0°27 0°30 0°36	Oe 4673. L, 81. W 6. W 34. W 26.
761 762 763 764 765	73 50 37.5 52 48 44.8 105 46 0.9 44 21 19.9 94 54 11.1	68·04 70·46 60·05 71·40 60·14	5 1 3 1	0.42 0.44 0.20 0.22 0.22 0.60	W 67, R 1751, A 1399, W 54. [N 7yr 793. Oe 4747, Bn. Oe 6644. W 154, Si <sub>2</sub> , Sp 2092.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
766 767 768 769 770	11867 11839 11864 11875 11901	7.5 6.5 7.7 7.0 6.5	6 7 <sup>m</sup> 2*-80 6 7 10:45 6 7 34:71 6 8 19:55 6 9 9:88	69.40 69.61 72.04	1 3 5 4 4	+ 2 <sup>8</sup> ·956 3·505 3·421 3·848 4·014
771 772 773 774 775	11969 12018 11989 12007 12038	7.0 6.5 6.0 6.5 6.6	6 10 27.37 6 10 38.82 6 10 58.72 6 11 45.86 6 12 28.23	70°29 68°49	2 3 5 5 5	3.408 3.192 3.416 3.490 3.457
776 777 778 779 780	12057 12070 12143 12096	8·7 5·8 7·0 7·5 7·0	6 12 46.68 6 12 56.53 6 14 3.48 6 14 39.31 6 14 49.97	76·28 70·87 70·15	1 5 4 1 4	3 <sup>1</sup> 93 3 <sup>4</sup> 2 <sup>2</sup> 3 <sup>8</sup> 43 2 <sup>9</sup> 66 4 <sup>0</sup> 27
781 782 783 784 785	12176 12134 12182 12216 12217	6.5 6.8 7.5 6.4 7.2	6 15 35.24 6 15 57.98 6 17 3.31 6 17 12.23 6 17 41.45	69.89 70.11 76.83	5 5 4 5	2·797 4·091 3·916 3·282 3·659
786 787 788 789 790	12246 12262 12296 12323 12325	6·5 7·4 7·4 6·8 8·1	6 18 20.14 6 18 50.56 6 20 21.90 6 20 30.50 6 20 40.92	74'12 69:89 69:88	2 3 5 5 4	3.424 3.527 4.060 3.572 3.589
791 792 793 794 795	12359 12316 12366 12402 12387	7.5 6.1 7.0 7.5 6.5	6 20 47'14 6 20 48'12 6 22 20'51 6 22 48'84 6 23 1'32	70'17	2 1 3 5	2.970 3.142 4.183 3.626 4.084
796 797 798 799 800	12437 12444 12494	7·2 6·5 5·5 6·8 6·5	6 24 17.53 6 24 18.37 6 24 50.13 6 25 21. 6 25 30.59	71.12	3 5 3 4	4.183 4.016 3.346 5.216 3.939
801 802 803 804 805	12475 12587 12596 12590 12628	7.5 5.9 7.5 7.3 7.5	6 25 39.44 6 27 17.2 6 27 35.9 6 27 47.90 6 29 0.0	71.75 75.78 70.51	4 6 3 5 3	4·318 3·046 3·141 3·438 3·398
806 807 808 809 810	12648 12676 12716 12801 12751	7.0 4.8 6.8 6.5 6.5	6 30 1.6 6 30 23.8 6 31 51.5 6 33 1.2 6 33 13.8	6 72.57 80.56	2 2 4 2 5	3.868 4.291 3.681 2.674 + 4.035

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
766 767 768	94° 58′ 72 3 36·5 75 22 43·5	67·65 68·27	5 6	+o"·62 p·63 o·66	W 158, Si <sub>2</sub> . W 148. W 163, PM 702.
769 770	59 51 33°2 54 48 42°4	75°07 72°81	4	o·80	PM 703, R 1773. W 194, Ar 1415, N 7yr [803, RC, 682, Y 2582.
771 772	75 53 54'7 84 51 45'3	76°04 74°43	3	0.93	See Notes.
773	75 34 21.8	70.59	5	0.06	W 272, R, 2920, Gl 1542.
774	72 37 39'I	66.26		1.03	W 286.
775	73 56 15.5	70.69	5	1.09	
776	84 50 49.6	82.05	1	1.13	
777	75 17 53.7	76.84	4	1.13	W - D 0
778	59 58 50.5	70.87	4	1.58	W 340, R 1825, 12yr 548.
779 780	94 32 27.1	67.54	4	1.30	W 363.
781	101 43 3.3	69.89	I	1.36	W 427, Si 669, L, 275.
782 783	52 37 17.9 57 39 50.8	70.11	5 5	1.40	Y 2611. W 432, R 1843.
784	81 3 6.3	76.83	4	1.20	W 466, Si <sub>1</sub> .
785	66 13 27.2	68.92	6	1.22	W 453.
786	75 12 40.4	72.61	2	1.60	W 492, Gl 1559.
787	71 10 8.9	74'12		1.65	W 489.
788	53 26 13.4	66.73	3 6	1.48	W 529. See notes
789	69 25 51.3	69.83	4	1.79	W 544, R 1864, Ar 1458,
790	68 46 6.5	72.37	4	1.81	[N 7yr 822, 9yr 619.
791	94 23 14'1	75.39	3	1.82	*Sp 2207.
792	87 1 9.1	70'17	1	1.82	W .06
793	50 9 49.8	76.10	3	1,00	W 586. W 616, T <sub>2</sub> , R 1882.
794 795	52 44 20.3	68.30	5	5.01	W 611.
796	50 7 43.7	72.78	3 5	2'12	W 654.
797 798	78 22 15.9	77.46	3	2.12	W 705, Sp 2237, Gl 1583.
799	31 47 32.6	66.56	2	2.55	T2, Ar 1476, RC 1757, N 791834, 99163
800	56 53 10.1	71.91	5	2,53	W 696, R 1896, 12yr 570, [6yr 489.
801	46 50 29.0	69.30	6	2'24	W 689.
802 803	91 7 38.9	71.75	6 3	2.38	W 776, L, 998, Gl 1594. Sp 2260.
804	74 34 27.6	70.88	4	2.43	1
805	76 12 26.7	70.63	5	2.23	R 1929.
806	59 0 24.6	66.00	3	2.62	[643.
807	47 24 13.7	67.10	5	2.65	Ar 1507, RC 1781, 9yr
808	65 17 42.9	72.27	4	2.78	W 909, R 1946, Y 2681.
809 810	106 45 55.7	80.56	5	2·88 +2·88	Bn. W 948.
010	33 37 143	00 34	3	1 2 30	740.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
811 812 813 814 815	12825 12813 12798 12849	6.0 8.1 7.3 6.5 6.7	6 <sup>h</sup> 33 <sup>m</sup> 34 <sup>s</sup> ·17 6 33 48·10 6 34 9·29 6 34 44·33 6 35 47·79	72.61 66.56 69.49 75.60 76.40	4 2 5 4 3	+ 2*·742 5·323 3·464 4·078 4·040
816 817 818 819 820	12907 12917 12943 12962 12985	5.5 7.0 8.5 7.3 6.9	6 35 58·04 6 36 33·47 6 37 47·57 6 38 35·14 6 39 °.	65.06 73.14 71.15 70.10	1 4 3 5	2.862 3.145 3.726 3.645 3.525
821 822 823 824 825	13027 12976 13059 12997 13048	7.0 8.0 6. 7.6 5.8	6 39 17.05 6 39 46.87 6 40 18.48 6 40 20.07 6 41 32.46	68.07 65.06 70.58 70.10 70.32	1 1 2 3 5	2.620 4.342 2.725 4.339 3.918
826 827 828 829 830	13055 13119 13171 13198 13138	6·9 7·0 6·5 6·7 7·5	6 41 53.22 6 44 0.28 6 44 24.65 6 44 27.00 6 44 53.19	73.60 69.13 70.83 71.39 69.09	4 3 4 4 3	4.000 4.384 3.649 3.063 4.646
831 832 833 834 835	13193 13242 13339 13305 13321	6·8 6·3 6·4 8·0 6·9	6 46 3.15 6 47 17.22 6 48 3.47 6 48 30.49 6 48 49.55	69·90 70·17 69·90 69·50	5 2 3 5 5	4:428 4:448 3:050 4:308 4:077
836 837 838 839 840	13327 13424 13428 13491	6·8 7·0 7·8 6·9 5·5	6 49 47.65 6 50 27.20 6 51 38.88 6 52 22.51 6 52 24.	70.61 78.77 70.08 76.08	3 3 2 3	4.784 3.351 4.256 3.158 2.480
841 842 843 844 845	13496 13535 13485 13547 13558	7.0 7.5 6.8 7.2 6.8	6 52 35.12 6 52 46.68 6 53 9.64 6 54 4.15 6 55 46.47	70.54 72.14 69.49 73.60 72.14	5 3 5 4 5	3°243 2°702 3°904 3°320 4°511
846 847 848 849 850	13573 13648 13653 13656	7.0 5.0 4.5 6.5 6.7	6 55 48.58 6 56 42.57 6 56 44. 6 56 51.43 6 57 44.70	75.07 70.49 76.62 70.50	1 5 4 4	4°077 3'327 2'390 3'366 3'868
851 852 853 854 855	13704 13698 13731 13735 13810	6.0 7.8 6.6 8.0 7.5	6 59 9'32 6 59 53'06 7 0 1'25° 7 0 5' 7 0 47'16	70.82 71.63 74.08 70.92	3 4 3 5	3'951 5'103 3'944 3'966 + 2'793

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities,
811	104° 2′ 9″.0	73'34	4	+2"*93	W 990, R23021, Si4 599,
812	30 25 56.8	66.26	2	2.92	See Notes. [L <sub>b</sub> 336.]
813	73 29 15.8	69.49	5	2.98	W 998, T <sub>2</sub> , Gl 1620.
814	52 44 3.7 53 46 9.8	75.60 76.40	4	3.03	W 1003, R 1966, Y 2694. W 1044, R 1977, Y 2700'.
815	53 46 9.8	70 40	. 3	3.11	W 1044,101977, 1 2700.
816	99 2 48.2	65.06	1	3'14	W 1064,R <sub>2</sub> 3035,Sp 2330.
817	86 50 45.2	73'32	5	3.18	W 1074, Si, Gl 1632.
818	63 37 5'3	71.13	3	3.59	W 1123.
819	66 30 9.5	68.25		3.36	
820	71 1 59.5	66.02	1	3.39	W 1168, R 3039.
821	108 55 34.5	68.07	I	3'42	Oe 5601.
822	108 55 34.5	0007	1	3.46	W 1171, Y 2726.
823	104 39 53.8	70.58	2	3.21	W 1198, Si <sub>4</sub> 614.
824	46 6 13.6	67.59	4	3.21	W 1189.
825	57 15 13.0	70.35	5	3.61	W 1227, R 1996.
0-3	37 -3 -3 -	7 - 3 -		3	7,
826	54 47 29.6	73.60	4	3.64	
827	45 0 40.3	66.86	4	3.83	RC 1826.
828	66 15 10.4	70.83	4	3.86	W 1317, T, Gl 1666.
829	90 23 26.4	71.39	4	3.86	W 1320, L, 1086, Gl 1667.
830	39 48 14.5	68.74	3	3.90	
827	44 1 4.9	69.50	5	4.00	Oe 7349.
831 832	44 1 4.9	70.08	2	4.11	Oe 7369, RC 1841.
833	90 58 19.8	70'17		4.12	W 1432, Si, L, 1111, Gl
834	46 36 39.9	68.26	3 6	4.51	[1684.
835	52 26 42.7	71.10	5	4.54	W 1422, R 2030.
806	27 15 44:2	69.69	_	4.32	Oe 7407, Bn.
836 837	37 15 44'3 77 55 50'9	78.77	5	4.38	W 1508, Sp 2440, Gl 1698
838	47 44 22.8	71.66	2	4.48	W 1507, R 2046, RC 1862
839	86 13 49.6	76.08	3	4.24	W 1575, Gl 1709.
840	114 28 10.4	68.09	I	4.22	T 2778, Ar 1581, Oe 5949,
		′			Bn, St 3314.
841	82 30 51.5	70.24	5	4.26	W 1580, Si, Gl 1710.
842	105 53 16.4	69.14	4	4.28	Bn.
843	57 24 46.9	66.79	7	4.61	W 1561.
844	79 12 5'7	73.60	4	4.69	W 1628, T2, Gl 1720.
845	42 2 35.8	72*14	5	4.83	RC 1875.
846	52 15 19.8	75.07	1	4.83	W 1638.
847	78 52 2.4	68.75	6	4,01	W 1711, Gl 1738.
848	117 45 21.6	68.07	1	4.91	See Notes.
849	77 13 29.5	76.62	4	4.92	W 1718, Gl 1740.
850	58 25 16.0	67.83	4	5.00	W 1701.
857	55 47 59.8	67.78	,	5.13	
851 852	55 47 59 <sup>.8</sup> 3 <sup>2</sup> <sup>2</sup> 7 3 <sup>.7</sup>	69.29	3 6	5.18	Oe 7564, RC 1885.
853	55 58 27.9	74.08	3	2,10	W 1775.
854	55 19 7.6	66.08	3	5.50	Ar 1610.
855	102 12 10.8	70.92	5	+5.56	
1 33			1		

No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
856 857 858 859 860	13836 13849 13863 13850 13868	7.8 7.0 7.5 6.8 7.6	7 <sup>h</sup> 2 <sup>m</sup> 0 <sup>n</sup> ·77 7 2 41·73 7 2 52·36 7 3 53·08 7 4 27·40	72°12 69°92 78°44 71°13 74°05	4 5 3 4	+ 3*·171 3·582 3·378 4·357 4·534
861 862 863 864 865	13915 13988 13962 14035 14066	6·8 6·5 7·0 8·1 7·0	7 5 0'21 7 6 20'53 7 6 31'82 7 7 26'15 7 7 57'87	71'11 70'74 76'37 72'35 72'17	4 5 4 3 1	3.880 3.391 4.380 3.180 2.990
866 867 868 869 870	14038 14028 14061 14098 14117	7°2 5°3 6°0 6°5 7°0	7 8 5'19 7 9 1'60 7 9 20'36 7 10 4'65 7 10 44'65	78.05 70.70 70.70 77.47 70.34	5 5 3 4	3.593 4.577 4.186 3.844 3.977
871 872 873 874 875	14206 14264 14282	5°5 7°7 6°5 7°7 6°5	7 11 34' 7 12 42'11 7 13 28'14 7 15 51'40 7 15 56'	76·79 79·16 70·92	3 1 5	2·405 3·528 2·685 4·340 2·465
876 877 878 879 880	14299 14293 14344 14332 14407	7.5 7.7 8.0 7.6 7.0	7 15 56·74 7 16 29·79 7 16 43· 7 17 14·14 7 18 38·48	70·74 77·47 71·90 73·09	5 3 6 2	4°009 4°514 3°574 4°225 3°491
881 882 883 884 885	14384 14421 14435 14406 14431	6 5 8·2 7·0 6·5 8·1	7 18 59'43 7 19 31'72 7 19 34'44 7 19 45'08 7 20 4'39	72 <sup>.</sup> 94 74 <sup>.</sup> 09 70 <sup>.</sup> 54 71 <sup>.</sup> 52 79 <sup>.</sup> 14	5 5 5 2	4.410 3.728 3.313 4.400 3.727
886 887 888 889 890	14423 14429 14525 14550 14556	8 o 7 o 7 o 8 i 7 5	7 20 45 7 21 12·88 7 22 10·69 7 22 51·41 7 23 2·67	69°09 73°12 70°75 79°18	4 4 5 1	4.579 4.693 3.525 3.553 3.529
891 892 893 894 895	14575 14562 14570 14604 14736	7·8 7·0 8·1 6·5 7·0	7 23 23'98 7 23 45'19 7 23 58'18 7 25 2'64 7 26 43'41	72.89 70.55 77.14 72.19 68.09	4 4 3 1	3·386 3·974 3 993 4·023 2·662
896 897 898 899 900	14678 14776 14716 14797 14765	6·5 6·0 6·4 7·0 7·3	7 27 7.60 7 28 3. 7 28 34.01 7 28 34.25 7 29 19.88	74'10 68'04 74'60 70'60	1 2 2 6	4°243 2°757 4°500 2°719 +4°079

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
856 857 858 859 860	85° 37′ 38″ 9 68 32 11.5 76 39 16.2 42 11 6.4 41 17 39.2	72.12 65.66 78.44 71.28 74.05	4 7 3 6 1	+5"·36 5:42 5:43 5:52 5:56	W 1925, Bn, Gl 1772. W 1906, Note. W 7, Sp 2548. PM 823, Oe 7644.
861 862 863 864 865	57 49 39'3 76 1 38'8 44 22 38'5 85 12 38'1 93 41 20'7	71.11 70.74 73.11 71.35 78.05	4 5 5 4 2	5.61 5.72 5.74 5.82 5.86	W 72. W 131, Gl 1797. Oe 7675, RC 1908. W 204, Si., Gl 1806.
866 867 868 869 870	67 49 8·7 40 18 55·0 48 53 49·4 58 49 21·8 54 37 8·5	78.05 70.70 70.70 77.47 69.09	5 5 3 4	5.87 5.95 5.98 6.04 6.09	W 204, RC <sub>2</sub> 777. T <sub>3</sub> , Ar 1649, 0e 7726, RC 1917. W 234, T 2916, 12yr 653, RC Bn. [1922, 7yr 558. W 279.
871 872 873 874 875	117 39 40.8 70 15 2.4 106 59 6.1 44 54 28.5 115 39 30.3	68.08 70.08 79.16 68.29 68.08	2 4 1 6 2	6·16 6·25 6·32 6·52	T2951,Ar 1665,Oe6528, W 344 [St 3534- Bn, see <i>Notes</i> . R 2201, Bn, Y 2978. T2998,Ar 1676,Oe6664.
876 877 878 879 880	53 26 57.8 41 12 35.7 68 18 8.9 47 35 21.5 71 36 28.3	70'74 77'47 62'10 70'43 73'09	5 3 4 3 2	6.52 6.57 6.59 6.63 6.75	R 2204. Oe 7857, Bn. W 461, PM 861, R 2211. W 460, R 2212. [Ar1679. W 503.
881 882 883 884 885	43 13 41°2 62 27 12°7 79 8 42°5 43 25 57°7 62 27 18°7	71.30 74.09 70.54 71.52 79.15	6 1 5 5 2	6·78 6·82 6·82 6·84 6·86	R 2220 Oe 7904, Bn. W 525. W 551,Y 3012, Gl 1860. R 2226, Oe 7921. W 539.
886 887 888 889 890	39 45 57'9 37 44 41'2 70 6 43'6 68 57 33'1 69 55 29'7	65.07 67.86 73.12 70.75 79.18	2 4 4 5 1	6·92 6·96 7·04 7·09 7·11	Oe 7942. W 601. W 623. R 2255.
891 892 893 894 895	75 52 37.8 54 8 11.7 53 34 20.7 52 32 52.8 108 15 13.3	72·89 69·88 72·87 66·14 68·09	4 4 4 2 1	7'14 7'17 7'18 7'27 7'41	W 673. W 643. W 650. W 683. Oe 6974.
896 897 898 899 900	46 41 47.6 104 15 19.4 40 56 57.0 105 55 21.9 50 50 40.1	74'10 67'08 65'56 74'60 69'85	I I 2 2 4	7.44 7.52 7.56 7.56 +7.62	W 739, RC 1985, Bn. W 835, Si <sub>4</sub> 735, Y 3074. Oe 8070. Bn. W 812.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
901 902 903 904 905	14766 14759 14814 14856	7:3 7:2 8:0 6:5	7 <sup>h</sup> 29 <sup>m</sup> 33 <sup>s</sup> ·o6 7 29 51·81 7 29 54·76 7 30 21·86 7 30 46·95	72·74 70·74 77·11 68·07 70·10	5 5 5 1 2	+4*·215 4·588 3·454 2·413 3·395
906 907 908 909 910	14893 14899 14923 14921 14928	6·5 7·0 7·5 6·0 6·5	7 31 11·39 7 31 46·99 7 33 28·28 7 33 29·46 7 33 45·55	68.09 73.09 71.17 69.49 73.11	1 2 3 5 5	2.638 2.928 2.725 3.602 3.379
911 912 913 914 915	14952 14934 14974 14961 14981	6·5 6·5 6·0 6·8	7 33 46·07 7 34 37·25 7 34 40·17 7 35 0·40 7 35 55·	79·16 72·93 71·11 80·63	2 5 5 2	2·707 3·907 2·744 3·389 3·583
916 917 918 919 920	14978 14966 15060	8.0 7.5 8.5 7.5 6.5	7 36 34.61 7 36 42.20 7 37 20.45 7 37 25.76 7 37 38.39	72.19 72.55 79.15 74.05 66.57	1 5 1 1	4 <sup>2</sup> 2 <sup>3</sup> 4 <sup>5</sup> 97 2 <sup>9</sup> 78 2 <sup>9</sup> 78 2 <sup>4</sup> 77
921 922 923 924 925	15046 15070 15092 15136 15097	5:3 8:0 7:8 6:0 7:3	7 38 18·38 7 38 40·10 7 39 38·59 7 39 55·36 7 40 5·12	70·10 72·11 70·78 73·62 79·90	4 3 6 4 4	4.016 3.609 3.611 2.935 3.864
926 927 928 929 930	15147 15173 15184 15207 15204	7.5 8.0 7.3 7.1 7.0	7 40 44.77 7 41 39.87 7 42 12.20 7 42 23.42 7 43 3.73	74.86 73.17 70.08 74.60 72.93	4 1 4 2 5	3°270 3°476 3°727 3°170 3°822
93 <sup>1</sup> 93 <sup>2</sup> 933 934 935	15230 15332 15342 15349 15335	7.0 8.0 8.0 8.0 7.9	7 43 54.85 7 45 25.72 7 45 52.26 7 46 9.00 7 46 42.73	70.24 78.88 73.36 70.27 72.11	5 4 4 6 5	3.961 2.932 3.015 3.149 3.907
936 937 938 939 940	15355 15384 15453 15442 15459	7·2 7·3 7·0 7·3 7·5	7 46 51·69 7 47 56·45 7 48 31·66 7 49 33·98 7 49 45·02	72.88 69.19	2 4 1 4 5	3.541 3.897 2.686 3.843 3.535
941 942 943 944 945	15435 15501 15516 15578 15585	7.5 7.0 6.8 8.1 7.0	7 49 50.55 7 51 19.06 7 51 40.35 7 52 35.01 7 53 18.29	73°38 77°48	5 4 4 3 5	4.511 3.300 3.344 3.187 +3.481

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
901 902 903 904 905	47° 15′ 24″·6 39 11 24′3 72 49 12′3 118 5 38′9 75 22 47′4	72.74 68.90 77.11 67.07 74.13	5 4 5 2 1	+7"·64 7·66 7·67 7·70 7·74	W 813, Bn. Oe 8093. W 846. [3088, 8t 3737. T 3125, Ar 1718, On 7081, Y W 905, Gl 1918.
906 907 908 909 910	109 25 32.5 96 40 42.1 105 45 49.9 66 41 38.6 75 56 31.9	68.09 73.08 71.68 66.80 73.11	1 2 2 7 5	7·77 7·82 7·96 7·96 7·98	Oe 7103. W 947, Si <sub>2</sub> . W 955. W 1003, Gl 1931.
911 912 913 914 915	106 33 44'3 55 42 33'1 104 58 33'1 75 30 5'8 67 18 30'6	79°16 72°93 71°59 80°63 68°09	2 5 4 2	7:98 8:05 8:05 8:08 8:15	Bn. W 988. T <sub>2</sub> , Bn, St 3783. W 1041, Gl 1935. W 1025, T 3174, Ar 1733, [12yr 689, Gl 1937.
916 917 918 919 920	46 40 15'4 38 40 34'5 94 23 6'6 94 24 45'4 116 3 19'5	72.19 72.55 79.15 72.62 66.57	I 5 1 2 2	8·20 8·21 8·26 8·27 8·29	Oe 8222, RC 2022, See Notes. T 3194, Ar 1739, Bn, Y 3144, [St 3820, B 210.
921 922 923 924 925	52 10 54.4 66 9 3.0 66 1 54.6 96 28 2.1 56 50 9.2	69.91 72.11 71.10 73.62 79.91	5 3 5 4 4	8·34 8·37 8·45 8·47 8·48	W 1083. W 1095. W 1116. W 1184, Si <sub>2</sub> . W 1122.
926 927 928 929 930	80 43 22·2 71 29 59·3 61 29 23·6 85 21 23·8 58 4 18·9	74.86 73.17 70.31 74.60 72.93	4 1 5 2 5	8·53 8·61 8·65 8·66 8·72	W 1173. W 1184, T2, 9yr 769, Gl 1967. W 1241, Si <sub>1</sub> , Gl 1969. W 1200.
931 932 933 934 935	53 30 47.8 96 39 58.1 92 44 10.2 86 17 43.1 55 3 2.9	70.59 78.88 73.36 70.27 72.88	6 4 4 6 4	8·78 8·90 8·94 8·96 9·00	W 1220, R. W 1326, Sp 2863. W 1336, PM 929, Si, Gl 1987. W 1339, Gl 1988. W 1293.
936 937 938 939 940	68 34 18·2 55 18 11·5 108 0 26·3 57 0 43·1 68 42 9·1	79°17 72°11 68°09 77°90 71°34	2 5 1 4 5	9.01 9.14 9.14 9.10	W 1305, Y 3217. W 1329. Oe 7611. W 1363, R 2331. W 1371.
941 942 943 944 945	46 9 48·2 54 59 1·4 53 34 50·9 84 24 41·0 70 48 59·9	73.50 71.47 73.38 77.48 72.75	5 5 4 3 5	9°25 9°36 9°39 9°46 +9°51	W 1362, <b>Y</b> 3232. W 1403. W 1411, R 2350. W 1523, Gl 2014.

No.	Lalande.	Mag.	Mean R.A. 1	875.0.	Epoch.	Obs.	Ann. Prec.
946 947 948 949	15595 15582 15637 15679	7.0 6.5 6.5 6.8	7 53 7 55 7 56	30:°93 47°09 12°18 9°65	70.53 76.49 79.17 70.31	5 4 1 4	+ 3°:505 3'918 3'975 3'842
950 951 952 953 954 955	15735 15746 15766 15783 15853 15811	7.5 8.0 8.2 7.7 7.2	7 57 7 58 7 59 8 0	31.76 57.09 9.88 7.67 17.05	74.60 70.15 80.17 72.90 75.10 70.28	4 5 4 1 6	3.477 3.688 3.295 3.819 3.283 3.865
956 957 958 959 960	15872 15898 15967 15961	8·1 6·8 8·0 7·6 7·0	8 o	47°12 35°38 9°64 57°08	70'21 78'15 71'14 81'66 73'14	2 5 3 2 5	3.633 3.809 3.632 2.578 2.849
961 962 963 964 965	15943 16021 16061 16053 16017	6·5 6·8 8·0 6·5 7·7	8 5 8 6 8 6	24.37 22.57 14.07 17.10 47.24	69·76 75·36 77·14 71·37 71·17	5 5 2 5 1	4'374 3'364 3'178 3'568 4'567
966 967 968 969 970	16081 16100 16085 16153 16116	7.0 7.2 6.7 8.0 7.3	8 8 8	9°22 24°00 47°21 59°90 16°83	82·12 72·64 71·22 74·12 74·58	1 6 1 2 5	3.510 3.343 4.677 3.136 4.155
971 972 973 974 975	16166 16173 16146 16184 16204	7.5 7.8 7.3 7.4 7.1	8 9 4 8 9 4 8 10 4	17.03 41.15 45.49 45.46 34.86	77.21 72.41 72.41 70.08	2 2 5 3 3	3°135 3°300 3°859 3°823 4°023
976 977 978 979 980	16237 16304 16269 16301 16350	7.5 5.7 7.3 7.3 7.5	8 12 2 8 12 2 8 13 3	42°37 28°12 43°88 39°44 49°06	76·78 76·58 70·61 71·32 71·82	3 5 5 4 4	3.585 2.830 3.891 3.834 3.485
981 982 983 984 985	16411 16378 16439 16391 16494	7.5 7.0 6.5 7.5 7.5	8 16 8 16 8 16	38·44 0·82 14·42 18·01	82·12 70·37 75·10 75·35 79·18	1 5 1 6 2	2.864 3.790 2.730 3.753 3.058
986 987 988 989 990	16489 16486 16534 16522 16529	7.6 7.8 6.5 7.5 6.9	8 18	13.91 50.76 5.95 48.74 1.93	69·69 72·61 81·15 71·42 76·65	5 4 2 4 4	3.263 3.834 3.120 3.884 + 3.876

No.	Mean N.P D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
946	69° 50′ 35″°0	70.23	5	+9":53	W 1458, T 3341, 6yr 584,
947	54 14 40.4	76.49	4	9.22	W 1455. [7yr 609.
948	52 31 1.5	79.19	I	9.66	W 1490. W 1517, R 2378, Bn.
949	56 37 13.7	70.31	4	9.73 9.84	
950	70 48 22.6	74.60	2	9 04	T <sub>2</sub> , N 7yr 1002, 9yr 788.
951	62 7 1.4	70.47	3	9.88	W 1567, PM 947, Tg.
952	79 8 52.4	80'17	5	9.89	W 1676, Gl 2044.
953	57 13 44.1	72.00	4	9.96	W 1592.
954	79 39 44'9	75.10	ī	10.02	Sp 2956.
955	55 36 24.4	70.64	4	10.02	W 1624.
956	64 5 13'4	70.51	2	10.00	W 1646, Ar 1813.
957	57 24 57.6	78.12	5	10.12	W 1663, PM 956, R 2410.
958	64 4 37.3	69.36	4	10,10	W 1682, R 2417, Ar 1817, St.
959	113 15 20.6	81.66	2	10.52	Oe 8059, St 4133. [306.]
960	100 58 34.5	73'14	5	10 20	W 19,Si <sub>2</sub> ,Si <sub>3</sub> 996,Y 3301.
961	41 20 49'1	69.43	7	10'36	Oe 8697.
962	75 37 29.9	75.36	5	10.43	W 77, T2, N 7yr 1019, 9yr 801.
963	84 41 53.8	77.14	2	10.20	W 105, Sp 2994, Gl 2085.
964	66 29 16.1	71.37	5	10.20	W 85.
965	37 16 45.8	68.12	2	10.24	R 2441, Oe 8746.
966	68 54 58.8	82.13	I	10.26	
967	76 34 29.8	72.64	6	10.28	W 131, T2, Sp 3001, Gl
968	35 3 8·6 86 47 16·0	71.51	2	10.69	R 2450, Oe 8784. [2090.
969		74.13	2	10.40	W 181, Gl 2095.
970	46 12 26.4	73.44	4	10.43	W 145.
971	86 49 8.5	77.21	2	10.43	W 187, PM 977.
972	78 34 24.6	72.70	2	10.75	W 194, Sp 3014.
973	53 53 16.8	69.73	5	10.76	W 160, R 2458.
974	56 16 41.6	71.09	4	10.83	W 191.
975	49 43 34.0	69.45	2	10.89	
976	65 26 14.5	76.78	3	10,00	W 218, Y 3340.
977	102 12 38.8	76.28	5	10.09	W 294, Bn, Si <sub>3</sub> 1023, Y
978	53 49 45.4	69.69		10.97	W 236. [3344, Note.] W 259.
979	55 40 10.5	70.58	5	11.04	W 259.
980	69 38 37.8	71.85	4	11.13	
981	100 38 59.9	82.13	ı	11,10	W 375, Si <sub>3</sub> 1030.
982	57 18 26.6	70.37	5	11.51	W 323, R 2491.
983	107 11 22.5	70.63	2	11.53	Oe 8427.
984	58 17 56.3	76.35	6	11.54	W 335, Bn. [1910.
985	90 44 21.8	79.18	2	11.37	W 446, Si, Si, 296, L
-04	0 0				W Cl area
986	80 10 14.8	69.71	5	11.38	W 440, Gl 2133.
987	55 15 21.1	72.61	4	11'42	W 394 [9yr 818, Gl 2137.
988 989	87 29 34.2	81.12	2	11'44	W 466, Si <sub>1</sub> , L <sub>1</sub> 1916, Y 3396, W 421.
999	53 27 56.7	71.42	4 4	+11.21	W 424.
990	33 41 3/1	1005	4	1 3	

See

No.   Lalande.   Mag.   Mean R.A. 1875-0.   Epoch.   Obs.   Ann. Prec.	_						
992	No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
993							
1663							
995	993		8.0		81.30		2.790
995	994	16631	7.0	8 22 14.86	69.71	5	3.574
997	995	16616	7.5	8 22 47.65	70.74		4.412
998		16673	1 '	17 0			, , ,
16739							
1000			7.5	1 2 11			
1001			6.2	0 0 0 1			
1002	1000	16740	6.5	8 25 58.65	69.38	3	4.304
1003							
1004	1				71.12	5	
1005					79'19	5	3.183
1006	1004	16869	8.2	8 28 19:43	72.28		3.029
1007	1005	16876	7.8	8 29 14.27	79.19	I	3.299
1008	1006		6.2		73.62	4	3.654
1009	1007	16899	7.5		69.59	2	3.754
1009	1008	16933	7.5	8 30 41.07	69.77	5	3.259
1010	1009	16987	6.0	8 31 14.00	72.92	4	2.989
1012	1010	16964	6.2		80.51	I	3.545
1012	1011	17011	7.0	8 31 38.72		I	2.845
1014	1012	17008	7.0		78.50	5	2.954
1014	1013	17007	7.3	8 31 54.56	72.37	5	3.093
1015	1014	16995		0			3.011
1017	1015	17087	7.0		76.66		
1018	1016	17110	7.0		66.16		2.756
1019	1017	17049	6.2	8 34 17.81	69.62	6	4.207
1019	1018	17081	7:3		71.95	4	3.797
1020	1019	17111				5	
1022         17182         7.0         8         37         36.40         77.51         3         3.871           1023         17207         7.0         8         38         15.06         70.74         5         3.768           1024         17249         7.0         8         39         7.96         77.18         2         3.468           1025         17333         7.0         8         41         3.76         66.18         1         2.735           1026         17327         7.3         8         42         3.74         70.39         5         3.762           1027         17337         8.0         8         42         24.41         73.23         1         3.796           1028         17359         7.0         8         42         53.31         77.74         5         3.798           1029         17368         8         0         8         43         8.54         70.37         5         3.788           1030         17397         7.7         8         43         18.78         79.95         4         3.197           1031         17350         7.5         8         43         <	1020	17131	7.0		77.16		3.865
1023         17207         70         8         38         15:06         70:74         5         3:768           1024         17249         70         8         39         7:96         77:18         2         3:468           1025         17333         7:0         8         41         3:76         66:18         1         2:735           1026         17327         7:3         8         42         3:74         70:39         5         3:762           1027         17337         8:0         8         42         24:41         73:23         1         3:796           1028         17359         7:0         8         42         53:31         77:74         5         3:795           1029         17368         8:0         8         43         8:54         70:37         5         3:788           1030         17397         7:7         8         43         18:78         79:95         4         3:197           1031         17386         7:5         8         43         45:39         73:17         4         3:594           1032         17350         7:5         8         43         45:39	1021	17141	7.5		70.86	3	
1023	1022	17182	7.0		77.21	3	
1025         17333         7.0         8 41         3.76         66.18         1         2.735           1026         17327         7.3         8 42         3.74         70.39         5         3.762           1027         17337         8.0         8 42         24.41         73.23         1         3.796           1028         17359         7.0         8 42         53.31         77.74         5         3.795           1029         17368         8.0         8 43         8.54         70.37         5         3.788           1030         17397         7.7         8 43         18.78         79.95         4         3.594           1031         17386         7.5         8 43         45.39         73.19         1         45.39           1032         17350         7.5         8 43         45.39         73.19         1         45.39           1033         17435         7.8         8 45         4.17         70.88         3         3.782           1034         17462         7.0         8 45         29.90         70.67         3         3.410	1023	17207	7.0			5	3.768
1025         17333         7°0         8 41         3°76         66°18         1         2°735           1026         17327         7°3         8 42         3°74         7°39         5         3°762           1027         17337         8°0         8 42         24'41         73'23         1         3'796           1028         17359         7°0         8 42         53'31         77'74         5         3'795           1029         17368         8°0         8 43         8'54         70'37         5         3'788           1030         17397         7'7         8 43         18'78         79'95         4         3'197           1031         17386         7'5         8 43         19'01         75'17         4         3'594           1032         17350         7'5         8 43         45'39         73'19         1         4'539           1033         17435         7'8         8 45         4'17         70'88         3         3'782           1033         17452         7'8         8 45         4'17         70'88         3         3'782           1034         17462         7'0         8 45	1024	17249	7.0	8 39 7.96	77.18		3.468
1027         17337         8 ° 0         8 42 24 41         73 ° 23         1         3 ° 796           1028         17359         7 ° 0         8 42 53 ° 31         77 ° 74         5         3 ° 795           1029         17368         8 ° 0         8 43 8 ° 54         70 ° 37         5         3 ° 788           1030         17397         7 ′ 7         8 43 18 ′ 78         79 ° 95         4         3 ° 197           1031         17386         7 ′ 5         8 43 19 ° 10         7 ′ 517         4         3 ′ 594           1032         17350         7 ′ 5         8 43 45 ′ 39         7 ′ 310         1         4 ′ 539           1033         17435         7 ′ 8         8 45 4 ′ 17         7 ′ 0 ′ 88         3         3 ′ 782           1034         17462         7 ′ 0         8 45 29 ′ 90         70 ′ 67         3         3 ′ 3410	1025					I	
1027	1026	17327	7:3	8 42 3.74	70.39	5	3.762
1028         17359         7°0         8         42         53°31         77°74         5         3°795           1029         17368         8°0         8         43         8'54         70°37         5         3°788           1030         17397         7°7         8         43         18'78         79'95         4         3°197           1031         17386         7'5         8         43         19'01         75'17         4         3°594           1032         17350         7'5         8         43         45'39         73'19         1         4'539           1033         17435         7'8         8         45         4'17         70'88         3         3'782           1034         17462         7'0         8         45         29'90         70'67         3         3'410	1027	17337	8.0		73.23		3.796
1029     17368     8.0     8.43     8.54     70.37     5     3.788       1030     17397     7.7     8.43     18.78     79.95     4     3.197       1031     17386     7.5     8.43     19.01     75.17     4     3.594       1032     17350     7.5     8.43     45.39     73.19     1     4.539       1033     17435     7.8     8.45     4.17     70.88     3     3.782       1034     17462     7.0     8.45     29.90     70.67     3     3.410	1028		7.0			5	3.795
1030     17397     7.7     8     43     18.78     79.95     4     3'197       1031     17386     7.5     8     43     19'01     75'17     4     3'594       1032     17350     7.5     8     43     45'39     73'19     1     4'539       1033     17435     7'8     8     45     4'17     70'88     3     3'782       1034     17462     7'0     8     45     29'90     70'67     3     3'410	1029						3.788
1032     17350     7.5     8     43     45'39     73'19     1     4'539       1033     17435     7.8     8     45     4'17     70'88     3     3'782       1034     17462     7'0     8     45     29'90     70'67     3     3'410			7.7	8 43 18.78			
1033     17435     7.8     8 45 4.7     70.88     3 3.782       1034     17462     7.0     8 45 29.90     70.67     3 3.410	1031	17386	7.5			4	3.594
1033     17435     7.8     8 45 4.17     70.88     3 3.782       1034     17462     7.0     8 45 29.90     70.67     3 3.410	1032	17350	7.5			I	
1034 17462 7.0 8 45 29.90 70.67 3 3.410	1033	17435	7.8			3	3.485
	1034			8 45 29.90			3.410
	1035	17480	6.8	8 45 33.09	78.51		+3.553

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
991 992 993 994 995	55° 54′ 16″·1 86 22 15·8 104 31 34·1 65 14 25·3 38 57 12·1	73°17 75°74 81°20 69°71 70°43	5 1 5 3	+11"·53 11·60 11·62 11·66 11·70	W 441. W 526,Si <sub>1</sub> , L <sub>3</sub> 26,Gl 2150. W 538, Si <sub>4</sub> 851, Sp 3098, L <sup>5</sup> W 479, RC <sub>3</sub> 872. [454- Oe 9033. Lee Moles
996 997 998 999	99 20 5.8 81 10 5.9 57 24 33.4 65 29 28.9 41 2 23.1	82·12 73·89 73·67 70·23 69·32	1 4 4 1 4	11.40 11.41 11.85 11.80	W 571, Si <sub>2</sub> . W 564, R 2540, Si <sub>1</sub> , Sp [3106, Gl 2158. W 571,T 3635, Ar 1887, [6yr 623, Gl 2167.
1001 1002 1003 1004 1005	84 49 5.0 81 7 16.2 84 4 11.1 92 19 37.9 63 37 54.4	73'40 71'17 79'19 72'58 79'19	4 2 5 5 1	12.01 15.00 15.00 15.01	W 665. W 671, Si,. W 687, Sp 3143, Gl 2175. W 704. W 658.
1006 1007 1008 1009 1010	61 16 16·8 57 16 43·4 63 30 37·3 94 30 1·1 65 52 27·0	71.41 70.17 69.58 72.92 80.21	3 1 5 4	12.30 15.30 15.30 15.31 15.30	W 681, T <sub>3</sub> . W 685, Bn. W 716, Bn. W 788, Si <sub>2</sub> , Gl 2194. W 736. Lee Protes
1011 1012 1013 1014 1015	102 9 6·9 96 22 26·5 88 52 23·8 51 24 2·2 87 38 18·1	82·12 79·17 72·37 72·16 76·66	7 5 3 2	12·32 12·33 12·34 12·39	W801, Si <sub>3</sub> 1069, Sp 3171. W 802, L <sub>6</sub> 348. Sp 3175, L <sub>1</sub> 2046. W 773. W 885, Si <sub>1</sub> , L <sub>1</sub> 2062, Gl
1016 1017 1018 1019 1020	106 50 42 39 8.0 55 21 29.5 52 50 16.6 52 37 52.6	69.62 71.95 70.97 77.16	6 4 5 5	12.49 12.50 12.53 12.63	Oe 8825. Oe 9229, RC 2192. W 835. W 869. R 2623.
1021 1022 1023 1024 1025	45 53 58.4 52 15 19.8 55 57 34.5 68 55 44.3 108 18 2.3	69.43 77.51 71.30 76.49 66.18	4 3 6 3 1	12.67 12.73 12.83 12.96	W 891. W 914, Y 3681. W 933. W 963. Oe 8969, Bn.
1026 1027 1028 1029 1030	55 49 6·0 54 29 58·2 54 28 11·4 54 42 43·1 82 59 24·8	70°39 73°23 77°74 69°57 79°95	5 5 5 4	13.11 13.08 13.02 13.03	W 1019. W 1025. W 1038, PM 1052. W 1089, Gl 2257.
1031 1032 1033 1034 1035	62 42 33.4 34 34 54.5 54 47 7.3 71 20 27.2 81 27 42.7	74.96 73.19 69.70 69.77 78.51	5 1 4 5 3	13.11 13.14 13.52 +13.59	W 1051. Oe 9357, RC 2213. W 1090. R 2676. [2272. W 1150, Sp 3255, Gl

No.	Lalande.	Mag.	Mean R.A.	1875-0.	Epoch.	Obs.	Ann. Prec.
1036 1037 1038 1039 1040	17512 17528 17535 17572	7°3 7°5 7°5 7°7 7°9	8 <sup>h</sup> 45 <sup>m</sup> 8 46 8 47 8 47 8 47	48°·27 54°18 4°91 34°69 54°	74'15 70'39 73'17 76'40	1 5 5 5	+ 3°·174 3°·590 3°·488 3°·784 3°·175
1041 1042 1043 1044 1045	17604 17584 17607 17666	6·5 7·0 7·2 7·2 6·0	8 48 8 48 8 49 8 49 8 50	41.36 52.29 37. 47.00 57.46	80.22 69.95 73.19 70.06	1 5 5	3.018 3.532 3.711 3.864 3.243
1046 1047 1048 1049 1050	17729 17719 17766 17750 17785	7.5 8.5 7.0 7.8 6.0	8 52 8 52 8 53 8 53 8 53	36·10 48·99 5·47 53·16 57·32	74·38 70·57 80·21 69·32 81·20	5 3 1 5	3°235 3°7°3 2°8°2 3°786 2°743
1051 1052 1053 1054 1055	17802 17831 17809 17845 17853	6·5 7·0 7·3 6·5 8·1	8 54 8 55 8 55 8 56 8 56	55.20 16.37 33.59 5.14 34.37	70°79 71°71 79°17 80°22 71°22	5 4 2 1 4	3·176 3·005 3·642 3·204 3·997
1056 1057 1058 1059 1060	17873 17921 17930 17899 17946	6·8 7·0 8·0 7·2 6·7	8 57 8 57 8 58 8 58 9 0	43.65 57.59 48.76 51.37 2 47	69·55 74·95 77·72 70·44 71·18	5 4 2 4 5	3.783 2.781 3.018 3.835 3.656
1061 1062 1063 1064 1065	18004 18019 18016 18074 18044	7.5 8.5 7.9 6.5 6.5	9 I 9 I 9 2 9 2 9 3	24.15 28. 22.09 53.56 5.15	74 <sup>2</sup> 2 70 <sup>4</sup> 2 80 <sup>4</sup> 1 71 <sup>5</sup> 6	3 5 5 3	3.280 2.994 3.750 2.809 3.643
1066 1067 1068 1069 1070	18083 18079 18110 18120 18140	6.0 7.8 8.5 6.8 6.0	9 3 9 4 9 4 9 4 9 4	8.59 14.68 44.28 47.46	79°17 68°57 72°23 71°03 67°16	2 5 2 5 1	2·876 3·748 3·024 3·227 2·686
1071 1072 1073 1074 1075	18159 18171 18162 18216 18231	8.0 8.0 8.3 8.1	9 5 9 6 9 6 9 7 9 8	45.58 1. 10.57 53.48 18.24	70·41 71·21 70·39 76·44	5 1 6 4	3°007 2°888 3°254 3°266 3°147
1076 1077 1078 1079 1080	18249 18251 18256 18317 18315	7.5 8.5 7.4 7.0 7.0	9 8 9 8 9 9 9 10 9 10	40.52 58.81 39.76 30.63 33.91	78·46 70·38 73·94 67·97 68·18	4 5 4 4 1	3°113 3°324 3°683 2°859 + 2°942

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1036 1037 1038 1039 1040	84° 11' 28"·4 62 36 13'3 67 18 35'6 54 24 20'5 84 3 45'1	74°15 70°39 73°17 75°71 75°10	1 5 5 4 1	+ 13"·28 13.35 13.36 13.39 13.41	W 1160, Si, T, Gl 2273. W 1129. W 1137, 6yr 641. W 1213.
1041 1042 1043 1044 1045	93 4 57.6 65 4 25.9 57 4 34.4 51 15 33.7 80 7 53.8	80°22 70°17 65°68 73°19 70°06	1 4 2 5 1	13.46 13.48 13.53 13.54 13.61	W 1183. W 1196, Ar 1977. W 1199. W 1285, Si,, T., 9yr 876, Gl 2299.
1046 1047 1048 1049 1050	80 32 21 57 5 457 105 30 93 53 39 53 108 43 138	74'38 70'57 80'21 69'29 81'20	5 3 1 6	13.72 13.73 13.75 13.80 13.80	W 1327. W 1274, Ar 1990. Oe 9195. W 1294. R 2714, Bn.
1051 1052 1053 1054 1055	83 52 13.7 93 58 5.9 59 24 24.6 82 12 41.1 46 2 51.4	70.79 71.71 77.52 77.18 71.55	5 4 3 2 3	13.86 13.88 13.90 13.94	See <i>Notes</i> . W 1399, L <sub>3</sub> 492, Gl 2320. W 1328. W 1414, Si <sub>b</sub> , Gl 2324. RC 2263, Bn. <i>Note</i> .
1056 1057 1058 1059 1060	53 19 24'0 107 0 11'3 93 17 6'6 51 13 22'1 58 17 52'7	69.64 77.55 77.72 70.84 71.18	4 3 2 6 5	14.04 14.02 14.11 14.11	W 1378. Oe 9289. W 1475, Si <sub>2</sub> , Gl 2337. W 1407, T <sub>2</sub> , RC 2274. W 1444.
1061 1062 1063 1064 1065	77 32 49'9 94 45 15'8 54 4 53'2 105 46 16'1 58 31 44'7	74.22 60.16 70.74 80.41 72.61	3 4 5 5	14.27 14.27 14.33 14.36	W 1524, Sp 3356. L <sub>3</sub> 514. W 1506. Oe 9382, L <sub>6</sub> . W 3.
1066 1067 1068 1069 1070	101 51 10.7 54 0 27.7 92 55 6.7 80 30 49.6 112 40 7.9	79'17 68'71 72'23 71'03 66'17	2 7 2 5	14·38 14·44 14·44 14·47	W 28, Si <sub>3</sub> 1135. W 35. W 50, Si <sub>5</sub> 394. W 59, Si <sub>1</sub> , Gl 2366. Oe 9427.
1071 1072 1073 1074 1075	94 2 40.6 101 19 14.8 78 49 7.5 77 59 14.2 85 16 19.2	70.89 65.21 74.21 70.40 75.22	5 1 5 3	14.53 14.55 14.66 14.69	W 76, L., W 83, Si, 1139. W 81, Sp 3381. W 127, Sp 3395. W 133, L, 69.
1076 1077 1078 1079 1080	87 23 58.9 74 28 20.7 55 58 33.5 103 18 53.3 98 13 27.1	77.63 70.38 73.94 66.87 64.68	5 5 4 3 6	14.71 14.72 14.77 14.82 + 14.82	W 143, Si,, L, 2380, Gl W 153. [2387. W 161. W 187, Si <sub>4</sub> 934. See Notes.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1081 1082 1083	18288 18329 18345	6·7 7·0 7·5	9 10 9 10	43°·01 54·41 27·25	71'23 67'16 65'22	5	+ 3°·723 2·904 2·891
1084 1085	18343 18362	8·0 6·7	9 11	36·85 8·93	71·26 72·20	5	3.027 3.483
1086 1087 1088 1089	18394 18412 18422 18477 18452	7.0 6.7 7.5 8.0 7.7	9 14 9 14 9 16 9 16	6.28 21.18 46.31 10.50	70.82 78.20 70.60 76.20 70.02	5 5 3 5	3.643 3.324 3.381 2.987 3.688
1091 1092 1093 1094 1095	18488 18466 18520 18510 18558	7.0 7.0 7.0 7.8 6.5	9 16 9 16 9 17 9 17 9 18	35.56 39. 43.22 57.46 36.70	71·20 80·21 72·19 79·20	5 3 5 2	3.003 3.734 3.369 3.694 3.015
1096 1097 1098 1099	18553 18567 18599 18638 18666	9°2 7°5 7°6 7°5 7°3	9 19 9 19 9 20 9 22 9 24	29.28 33.40 11.16 38.	71.72 73.19 60.16	2 I I	3.884 3.379 2.756 3.614 3.892
1101 1102 1103 1104	18691 18754 18760 18775 18794	6·8 7·0 7·5 6·5 7·0	9 25 9 25 9 26 9 26 9 26	2.70 32.62 39.21 50.80 53.06	79°18 66°16 69°58 70°84 80°19	1 6 5 2	3'940 2'924 3'661 3'441 2'956
1106 1107 1108 1109 1110	18810 18832 18857 18867 18887	7.5 8.0 7.0 8.0 6.5	9 28 9 28 9 28 9 30 9 30		72'42 80'22 80'21 70'24 73'47	5 1 4 4	3.655 3.030 2.904 3.571 3.041
1111 1112 1113 1114 1115	18899 18924 18921 18959 18984	7.5 8.0 6.8 7.5 4.0	9 3° 9 3° 9 3° 9 3° 9 3°	26.96 29.20 39.98	81·22 72·73 71·42 74·25	2 2 5 2	2.918 3.036 3.263 3.025 3.064
1116 1117 1118 1119 1120	18976 18966 18987 19006 19048	7·8 7·0 6·2 8·4 7·2	9 33 9 33 9 34 9 36	37.31 11.00 49.61	77.73 69.93 70.44 72.23 77.23	4 4 5 3 2	3.196 3.732 3.568 3.516 3.615
1121 1122 1123 1124 1125	19068 19084 19096 19117 19104	7.7 8.0 6.5 7.5 7.3	9 36 9 36 9 37 9 38 9 38	52°43 32°74 8°20	76.02 69.56 69.17 80.57 74.03	5 6 5 3 5	3.626 3.226 3.347 3.125 +3.732

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1081	54° 6′ 45″·o	71.53	5	+ 14".83	W 182, Y 3891.
1082	100 34			14.84	W 197, Si <sub>2</sub> , Si <sub>3</sub> 1149.
1083	101 26 18.5	65.55	1	14.87	W 211, T 4073, Ar 2049, N75r 1142, W 214, Si <sub>2</sub> , 12yr 814. [Si <sub>3</sub> 115t.
1084	92 51 44.4	71.26	1	14.88	W 214, Si2, 12yr 814. LSi3 1151.
1085	51 17 1.8	72.20	5	14.97	W233, PM 1104, R 2825, RC [2311, Y 3904.
1086	57 12 19.5	70.82	5	15.03	
1087	74 6 0.6	78.20	5 6	15.04	W 262.
1088	70 43 10.3	70.32	6	15.07	W 279, Bn.
1089	95 31 46.5	81.52	2	15.14	$\operatorname{Sp}_{3452}, \mathbf{L}_{3}_{587}.$
1090	54 54 58.7	69.38	6	15.14	Bn.
1091	94 30 24.9	71.30	5	15.17	W 321, Si2, L6, Gl 2418.
1092	52 52 40.5	69.68	2	15.17	
1093	71 45 16.2	80.51	3	15.23	W 348, R 2855.
1094	. 54 18 42.1	72.19	5	15.25	W 344.
1095	93 44 43.6	79.20	2	15.58	
1096	46 41 41.3	69.39	5	15.33	W 382.
1097	70 24 5.2	73.19	I	15.34	W 390, 9yr 909.
1098	110 13 18.1	60.16	1	15.37	Oe 9699.
1099	57 24 42.4	60.17	1	15.21	W 445.
1100	45 42 27.1	60.12	2	15.00	W 471, Y 3967.
1101	43 56 5.0	74'15	2	15.65	Oe 9990, RC 2357.
1102	100 0 6.6	57'17	I	15.67	W 530, Si₂ L₅ 538.
1103	54 38 8'1	69.23	8	15.73	
1104	65 59 24.1	70.84	5	15.74	W 541.
1105	97 57 11.4	80.19	2	15.4	W 569, Si <sub>2</sub> , Sp 3509, L <sub>3</sub>
1106	54 39 44.3	72.42	5	15.81	W 567.
1107	92 56 5.9	80.22	I	15.82	See Notes.
1108	101 34 8.5	80.51	I	15.84	W 619, Si, 1175, L, 550.
1109	58 28 59.0	70.24	5	15.91	
1110	92 13 9.1	71.55	3	15.92	L <sub>1</sub> 2558.
1111	100 42 59.1	81.55	2	15.93	W 650, Si <sub>2</sub> , L <sub>5</sub> 557.
1112	92 36 36.2	72'73	2	12.99	W 672, Sp 3539, Gl 2497.
1113	76 42 10.6	71.42	5	15.99	W 670, Sp 3538, Gl 2498.
1114	93 27 2.3	74*25	2	16.02	W 699, Si₂, L₃ 674.
1115	90 34 35.2	67.18	5	16.09	See Notes.
1116	81 9 28.0	75.23	2	16,10	W 713, Si, Gl 2512. [4032.
1117	50 28 44.6	67.02	7	16.10	W686, PM 1143, RC 2379, Y
1118	58 9 18.9	68.73	6	16.13	W 696, T 4266, Ar 2124.
1119	60 44 22.7	72.23	3	16.14	W 719.
1120	55 20 0.4	77.23	2	16.54	W 751.
1121	54 42 26.7	76.02	5 6	16.56	W 765.
1122	78 54 21.4	69.26	6	16.57	W -0- D0
1123	70 33 44'9	68.83	6	16.30	W 780, R 2928.
1124	86 4 30.7	80.57	3	16.33	W 809, Si,, Gl 2531.
1125	49 35 20.7	74.03	5	+ 16.32	W 789, R 2931.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
1126	19137	6.5	9 <sup>h</sup> 3 <sup>8m</sup> 37°.77 9 3 <sup>8</sup> 55.14	68.70	I	+ 2°.675 3°342
1128 1129 1130	19164	8·0 5·8 6·7	9 39 12° 9 39 34°40 9 40 16°64	75 <sup>2</sup> 4	3 5	2.746 3.172 3.416
1131 1132 1133	19191 19200 19217	7.0 8.0 7.5	9 40 38·54 9 40 59·96 9 41 3·37	80°70 69°89 81°24	2 3 1	3.192 3.550 5.036
1134	19231	7.5 6.8	9 42 11.07	72.73	4 4	3·327 3·629
1136 1137 1138 1139 1140	19272 19263 19273 19285 19291	8·o 7·2 7·5 8·3 6·3	9 43 7.41 9 43 24.06 9 44 6.82 9 44 19.56 9 44 46.43	80·74 70·91 66·71 74·26 72 <b>·</b> 97	2 3 1 1 4	2.963 3.541 3.704 3.539 3.664
1141 1142 1143 1144 1145	19326 19343 19333 19371 19376	7.0 7.0 6.8 7.8 6.5	9 45 0'91 9 45 47'60 9 46 9'35 9 47 0'18 9 47 8'98	81.22 76.72 70.55 70.42 73.55	2 4 5 5 3	2·869 3·081 3·600 3·272 3·157
1146 1147 1148 1149 1150	19386 19419 19433 19437 19473	7'5 7'0 5'0 7'0 7'5	9 48 0.45 9 48 30.07 9 48 58. 9 49 20.09 9 50 18.97	71.73 75.72 68.21 77.75	3 4 2 2	3.418 2.913 2.831 3.017 3.133
1151 1152 - 1153 1154 1155	19482 19479 19517 19522 19531	8·3 7·1 7·2 6·7 8·5	9 50 38·28 9 50 43·67 9 52 5·27 9 52 30·22 9 52 41·66	72'25 69'62 78'44 70'82 81'20	3 5 5 5 2	3'121 3'291 3'356 3'042
1156 1157 1158 1159 1160	19547 19568 19590 19608 19637	8·o 7·5 7·5 9·o 7·o	9 53 9' 9 54 48'88 9 55 12'20 9 55 39' 9 56 40'18	69·61 74·25 81·04	5 2 5	2·878 3·507 3·067 2·865 3·012
1161 1162 1163 1164 1165	19613 19606 19635 19661 19679	7.0 6.5 7.7 7.5 8.1	9 56 41.21 9 56 57.62 9 57 1.41 9 58 14.96 9 58 16.08	73.49 69.23 71.24 70.26 80.24	4 6 5 1 2	3.525 3.979 3.315 3.552 3.138
1166 1167 1168 1169 1170	19671 19703 19713 19733 19735	7.5 8.0 6.5 7.5	9 58 26.62 9 59 13.97 9 59 18. 10 0 15.51 10 0 53.36	69.88 74.26 81.83 71.64	3 3 5	3°557 3°345 2°966 2°825 + 3°259

No.	Mean N. F	P.D. 1	1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1126	117°			67.16	3	+ 16".36	T4301,Ar 2138,Oe 10070,
1127	70	44	29.1	68.70	2	16.37	W 800, R 2935. [St 5261.
1128	112	54	36.0	66.17	I	16.39	Oe 10084, Bn.
1129	82	42	57.4	75.24	3 6	16.41	CA 205, Ar 2140, T <sub>2</sub> , Bn, N7yr W 827. [1198, Y 4059.
1130	65	46	31.5	68.56	0	16.44	•
1131	80	51	8.4	80.70	2	16.46	Sp 3596. W 871, Gl 2543.
1132	79	2	15.4	68.95	4	16.48	W 871, Gl 2543.
1133	100	9	59.2	70.70	2	16.48	W 881, S12, L, 587.
1134	71	2 I	44'1	72.73	4	16.54	W 867, Y 4091.
1135	53	32	39.5	71.73	4	16.57	W 879.
1136	98	15	17.0	80.74	2	16.28	Si <sub>2</sub> , Sp 3612, L <sub>3</sub> 730.
1137	58	I	30.6	70.91	3	16.60	W 892.
1138	49	48	37'9	66.40	2	16.63	Ar 2153, RC 2403.
1139	- 57	58	47'3	74.26	1	16.64	W 907.
1140	51	30	0.3	72.97	4	16.67	W 916, T 4342, Ar 2157, RC [2405, Y 4110, Gl 2560.
1141	105	17	47.6	81.55	2	16.68	Bn, Si, 999, L.
1142	89	20	18.3	76.72	4	16.41	W 970, Si1, L1 2695, Gl 2568.
1143	54	25	43.7	68.48	4	16.73	W 948, T2, Gl 2569.
1144	74	40	30.4	68.63	5	16.77	W 980, Y 4125.
1145	83	27	15.0	73.22	3	16.78	W 996, Si, T2, Gl 2573.
1146	64	46	7.8	71.73	3	16.82	W 991.
1147		2 I	15.5	75.72	4	16.84	W 1025, Si <sub>s</sub> 1207.
1148	108	25	7.0	68.18	I	16.86	Bn. [Gl 2584.
1149	94	23	4.0	68.51	2	16.88	W 1037, Si, Sp 3651, L,
1150	85	9	50.6	77.75	2	16.93	W 1057, Si,, Bn, Gl 2589.
1151	86	4	21.7	72.25	3	16.95	W 1062, L <sub>2</sub> 134.
1152	72	56	49.0	66.89	7	16.92	W 1055, R 3015.
1153	78	56	48.2	78.44	5 6	17.01	W 1096.
1154	68	4	58.6	69.02	6	17.03	W 1095.
1155	92	25	30.5	81.30	2	17.04	W 1109, L, 2751.
1156	105	24	53.0	60.16	I	17.06	Oe 10266, L. [Y 4169.
1157	57	52	0.2	67.18	8	17'14	W 1135, Ar 2184, T <sub>s</sub> ,
1158	90	25	3.4	74'25	2	17.12	W 1160, L12767, Gl2603.
1159		43	54.6	68.20	1	17.17	Oe 10293.
1160	95	0	59.2	81.04	5	17.22	W 1199, L <sub>2</sub> 791, Gl 2608.
1161	J 3.	45	0.3	73.49	4	17.22	W 1181, T, Y 4178.
1162	, ,,	1	27.0	68.31	6	17.23	RC 2435.
1163				70.27	6	17.53	W 1191.
1164				68.76	2	17.29	W T Cl
1165	84	23	31.1	80.24	2	17.29	W 1232, T <sub>2</sub> , Gl 2616.
1166				67.80	5	17:30	W 1210, T, Y 4195.
1167				74.26	I	17'34	W 1238.
1168	, ,			68.51	I	17'34	W 1252, Sp3705, L2804.
1169	1			75.41	4	17.38	Oe 10357.
1170	74	13	48.4	71.64	5	+17.41	W 1284.
I				1			

No.	Lalande.	Mag.	Mean R	.A. 1875·0.	Epoch.	Obs.	Ann. Prec.
1171 1172 1173 1174 1175	19743 19750 19782 19810 19814	7.5 6.5 7.7 6.5 6.0	10 10 10 10	1 <sup>m</sup> 7 <sup>8</sup> ·53 1 9·68 2 57·21 3 48·83 4 0·35	70.63 77.89 71.43 81.26 78.24	5 3 5 1 4	+ 3°.090 2.875 3.106 2.940 2.932
1176 1177 1178 1179 1180	19808 19823 19828 19835 19833	6.5 7.8 6.5 7.0	10 10 10	4 13.09 4 40.25 4 42.92 4 49.83 5 9.39	70°23 71°93 67°24 81°24 70°83	5 3 1 1 5	3°324 3°051 2°984 2°898 3°315
1181 1182 1183 1184 1185	19837 19870 19865 19877 19886	7.0 8.3 6.5 8.0 7.5	10 10 10	5 36·29 6 34·19 6 45·73 6 52·86 7 53·45	73'92 83'26 72'23 81'24 70'24	3 1 4 1 5	3.425 3.114 3.406 3.182 3.647
1186 1187 1188 1189 1190	19909 19914 19911 19936	8·5 7·9 6·8 6·0 7·0	10 10 10	8 20.70 8 29.76 8 51.72 9 4.47 9 59.48	72·22 75·24 69·22 72·36 77·92	1 4 5 2 3	3·181 3·208 3·522 2·949 2·956
1191 1192 1193 1194 1195	19967 19960 19964 19991 20002	7.0 8.0 6.5 6.0 7.2	10 I	10 13.91 10 25.01 11 15.54 11 24.96	81.24 76.25 69.40 68.19 75.21	1 5 5 2 1	2·901 3·098 3·736 2·992 3·273
1196 1197 1198 1199 1200	19985 20015 20045 20059 20052	7.0 8.1 8.0 7.0	10 1	12 10.81 12 46.14 13 18. 14 7.89	69·98 74·28 71·26	4 1	3'919 3'177 3'024 2'984 3'476
1201 1202 1203 1204 1205	20076 20086 20101 20105 20129	7.0 6.0 7.0	10 1	26.95 14 49.61 15 54.05 15 54.86 16 3.44	74.50 79.26 68.18 70.70 81.24	8 1 1 4 3	3°023 3°022 3°476 3°431 2°939
1206 1207 1208 1209 1210	20112 20135 20170 20169 20191	7.7 7.0 6.7 6.8 6.0	10 10	16 10°14 16 51°28 17 45°45 18 15°19 18 39°50	74.88 70.75 80.25 71.48 77.95	5 4 2 5 3	3.282 3.358 3.102 3.502 3.167
1211 1212 1213 1214 1215	20202 20247 20230 20233 20296	7 <sup>2</sup> 9 <sup>0</sup> 7 <sup>7</sup> 7 <sup>5</sup> 6 <sup>8</sup>	10 10	19 18'97 19 55' 20 0'35 20 19'08 21 58'38	74.54 69.74 73.20 71.09	4 4 2 6	3°34 <sup>1</sup> 3°39 3°343 3°577 + 3°396

No.	Mean N.	P.D. 1	1875.0	Epoch.	Obs.	Ann. Prec.	Authorities.
1171	88°	28' 1 31	19" <b>·</b> 7	70.06 75.89	6	+ 17"-41	W 1289, Si <sub>1</sub> , L <sub>1</sub> 2809. Oe 10377.
1173	87	3.	0.4	72.05	5	17.20	W 6, L, 154, Gl 2633.
1174	101	28	53.6	70.41	2	17.23	0, 2, 154, 0 2055.
1175	102	11	57.8	78.24	4	17.54	W 29, T <sub>2</sub> , L <sub>6</sub> 654, St 5507.
1176	68	41	2.1	67:35	7	17.55	[2841.]
1177	91	48 48	8.8	71.93 63.82	3	17.57	W 44, Bn, Sp 3729, L
1179	97		41'0	81.54	3	17.57	W 47, T 4523, Ar 2211, N7yr W 50,Si <sub>4</sub> 1030[1235,L <sub>6</sub> St5516
1180	69	5 15	56.4	70.83	5	17.59	W 68.
1181	61	8	29.5	73.03	5	17.61	W 77.
1182	86	13	33.4	83.26	I	17.65	L, 164.
1183	62	14	46.7	71.91	3	17.66	W 0 G G -6 -
1184	80	11	45.7	81.24	1	17.66	W 81, Si, Gl 2645.
1185	47	30	17.8	70.20	4	17.70	W 132.
1186	80	10	2.4	72.22	1	17.72	W 112, Gl 2655.
1187	77	42	22.9	75.02	5	17.73	W 116, R 3106, Y 4265,
1188	54	12	53.6	69.18	5	17.74	W 151. [Gl 2656.
1189	101	10	10.0	66.55	2	17.75	L6.
1190	100	34	54'9	75'24	4	17.79	Si <sub>2</sub> , L <sub>5</sub> 671.
1191	105	31	12.2	81.24	I	17.80	Bn, L <sub>6</sub> ,
1192	87	34	20.1	76.25	5	17.81	W 147, Si, L, 2886, Gl
1193	42	36	48.7	66.87	1	17.84	Oe 10716, Bn. [2666.] See Notes.
1194	97	26	41'9 8'4	75.29	2 I	17.85	W 219.
1195	71	40					W 219.
1196	35	35	48.8	68.22	3	17.88	777 0
1197	80	9	39.1	74'28	1	17.90	W 189.
1198	94	36	0,1	68.21	3	17.92	W 207, Ar 2244, L6.
1199	98	25	47.7	67.20	I	17.94	W 212, Si <sub>2</sub> , Sp 3785, L <sub>3</sub>
1200	55	53	58.6	70.19	1	17.95	W 254. [859. [G1 2685.
1201	94	45	12.3	71.58	4	17.96	W 224, Si2, Bn, L2 863, Y 4302,
1202	94	47	12.1	70.58	2	17.98	W 229, Si2, Bn, L3 866, Y 4307, Gl
1203	55	28	17.3	68.18	2	18.03	Ar 2251, N7yr 1258. [2687.
1204	58	31	26.1		5	18.02	W 290, Y 4313.
1205	102	46	48.3	81.24	3	18.03	W 251, Si <sub>3</sub> 1255, L <sub>5</sub> 700.
1206	70	14	21'1	74.88	5	18.03	W 295, R 3171.
1207	63	47	53.6	70.87	3	18.09	W 312.
1208		0	0.1	80.52	2	18.00	L <sub>2</sub> 211.
1209			43.0	71.08	6	18.11	Y 4327.
1210		34	20.5	77'95	3	18.13	See Notes.
1211	64	39	1.0	74.24	4	18.12	W 353, R 3186.
1212	1	•	1.8	66.20	3 6	18.17	W 324, Ar 2263.
1213	64		58.9	67.73		18.18	W 367.
1214			43'3	73.50	2	18.10	777 M . ( A
1215	59	38	1.2	70.21	6	+ 18.25	W 409, T 4679, Ar 2273.
					1	1	

No.	Lalande.	Mag.	Mean R.A	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
1216 1217 1218	20303 20304	7°2 7'8 8°5	10 22	m 58"·53	80.91 77.87	3 5	+ 3**250
1210	20309 20301 20325	7.7	10 22 10 22 10 22	23.74	72·50 75·95	5	3·395 3·654 3·380
1221 1222 1223	20357 20379 20391	7°5 7°7 6·8	10 23 10 24 10 25	23.64	71.20 75.30 74.21	4 1 4	3·146 3·320 3·323
1224	20396 20443	7°4 7°0	10 25 10 26	55.29 51.41	77.24 68.31	5 1	3.029
1226 1227 1228 1229 1230	20432 20453 20464 20483 20484	7'0 7'2 7'0 7'0 7'0	10 26 10 28 10 28 10 28 10 28	55.74 1.75 4.23 30.06 39.33	73.79 70.86 73.61 71.78 74.78	2 5 2 4 6	3·308 3·619 2·987 3·043 3·098
1231 1232 1233 1234 1235	20491 20521 20539 20556	6·5 7·0 7·0 5·0 6·5	10 29 10 30 10 30 10 31 10 31	7'16 4'26 46'08 21'	72·26 71·64 75·77 72·46	2 5 4 5	3.029 2.983 2.999 2.818 2.958
1236 1237 1238 1239 1240	20566 20554 20609 20596 20618	7.7 5.7 8.0 7.5 8.0	10 31 10 31 10 33 10 33	56.91 57.99 26.71 28.75 0.38	75 <sup>2</sup> 9 79 <sup>5</sup> 7 71 <sup>5</sup> 8 70 <sup>0</sup> 5 74 <sup>2</sup> 6	4 2 3 5 1	3.130 3.472 2.964 3.518 3.000
1241 1242 1243 1244 1245	20623 20630 20642 20655 20680	7.6 8.2 7.7 7.0 6.5	10 34 10 34 10 35 10 35 10 36	38·84 50·34 5·95 48·26 21·29	71·87 75·30 73·67 79·07 65·26	5 3 5 5	3°261 3°151 3°170 3°236 2°959
1246 1247 1248 1249 1250	20673 20695 20703 20712 20742	8·6 7·2 6·8 7·7 8·4	10 36 10 37 10 37 10 37 10 39	46.91 28.76 30.82 50.94 25.	69.95 71.25 75.75 75.30	3 4 4 3	3.517 3.501 3.247 3.164 3.299
1251 1252 1253 1254 1255	20748 20764 20767 20788	6·5 8·7 8·0 7·0 8·2	10 39 10 39 10 40 10 40 10 41	42.47 46.61 30.08 50.73 2.21	72.93 74.30 77.86 69.52 69.94	6 2 5 4 3	3.182 3.370 3.267 3.476 3.097
1256 1257 1258 1259 1260	20778 20823 20850 20852	8.0 6.5 6.8 8.0	10 41 10 42 10 43 10 43 10 43	12.74 18.19 28.19 50.04 57.79	68·77 72·26 73·25 75·28 65·31	4 1 2 1 1	3.475 3.062 3.000 3.267 + 3.008

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1216	72° 13′ 46″·2	80.01	3	+ 18"-25	W 412, Y 4355.
1217	76 4 25.9	77.87	5	18.25	W 264. Gl 2728
1218	59 40 47.5	68.18	2	18.59	W 364, Gl 2728. W 421, Ar 2275.
1219	43 30 30.0	73'59	3	18.50	Oe 10879.
1220	60 46 48.6			18.58	
1220	00 40 400	75.03	4	10 20	W 437.
	82 18 4.0	# T. # C		.0.00	[L <sub>2</sub> 251, Gl 2739.]
1221		71.20	4	18.32	W 403, R 3212, Bn, Sp 3845,
1222	65 16 33.4	75.30	1	18.35	W 472, R 3218.
1223	64 54 58 1	73.02	5	18.37	W 484.
1224	50 8 9.5	77'24	5	18.39	W 491. [Gl 2748.
1225	94 42 49'9	68.51	1	18.42	W 447, Si, Sp 3863, L,
1226	66 0 21.3	69.06	4	18.42	W514,PM 1217,R3239.
1227	43 42 1.9	67.96	7	18.46	R 3244, Oe 10955, RC
1228	99 15 16.1	70.82	3	18.46	Bn, L,743, Y4401. [2518.
1229	93 14 56.3	70.22	5	18.48	W 486, Si, Sp 3871, La 919, Gl.
1230	87 9 2.8	74.78	5 6	18.48	W489, Si,, Gl 2756. [2755.
3-	, , , ,	147	_		1 4-3, 3 7 3 2 7 5 2
1231	94 43 0.6	72.26	2	18.20	L, 923.
1232	99 56 8.7	71.64	5	18.23	W 515, L, 753.
	98 11 27'1			18.29	W 523 Si T. 027
1233		75.77	4	10.50	W 532, Si2, L. 931. 15825.
1234		66.74	4	18.57	T 4772, Ar 2310, Oe 10754, Y 4431, St
1235	102 44 7.6	72.46	5	18.57	W 544, T2, Si3 1284, L6 759, [Y 4430, St 5827.
6	83 26 14.3		١.	-0.40	W 552, Si, Gl 2765.
1236	1 .0	75'29	4	18.59	
1237	51 26 19.7	79.57	2	18.29	See Notes.
1238	102 20 39.5	70.65	5	18.64	W 579, Si <sub>3</sub> 1287. W 652, RC 2538.
1239	47 49 19.6	71.20	4	18.64	W 652, RU 2538.
1240	98 23 36.2	68.58	3	18.66	W 587, L, 946.
	60			-0.60	W
1241	68 47 42.0	71.05	6 -	18.68	W 679.
1242	80 47 7.4	75.30	3	18.68	W 595, L, 356, Gl 2773.
1243	78 36 30.5	73.67	5	18.69	W 604, R 3291, T2, 7 yr 831,
1244	71 7 35'9	79.07	5	18.71	W 704. [Sp 3909, Gl 2776.
1245	103 19 14.1	60.18	1	18.73	W 634, Si, 1058, L, 783.
					W. C.D.
1246	46 52 6.2	69.95	3	18.75	W 726, Bn.
1247	47 37 49'4	71.25	4	18.77	
1248	69 35 8.2	75.75	4	18.77	
1249	78 58 9.5	75'30	3	18.78	W 656, R 3312, Sp 3923,
1250	63 43 44.7	68.24	2	18.83	[Y 4476, Gl 2788.
	n6 an ann		_	_0.0	n vm 8 a n
1251	76 35 39.5	73.06	5	18.84	7 yr 837.
1252	56 57 59.0	74.30	2	18.84	R 3323.
1253	66 46 1.3	77.50	4	18.86	W 800, R 3328.
1254	48 13 52.2		6	18.87	W 807, RC 2558.
1255	86 49 29.9	69.21	4	18.88	W 708, Ar 2342, L, 359,
1 2016	48 10 56.2	6,000		18.88	[Gl 2799.] W 815. [L <sub>1</sub> 3089, Gl 2802.]
1256		64.70	2		W 722 R 2245 Si
1257	91 17 58.0	68.25	I	18.92	W 733, R 3345, Si,
1258	99 11 28.7	71.49	3	18.95	W 760, L 824.
1259	65 55 59.8	75.28	1	18.96	W 865. [Sp 3955, L, 976.]
1260	98 19 45.2	68.50	3	+18.96	W 768, T4889, Ar 2352,
			<u> </u>		

No.	Lalande.	Mag.	Mean R	.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1261	20876	6.8	10h 4	4 <sup>m</sup>	34"17	72.75	6	+ 3*166
1262	20882	8.3		4	41.25	75.30	I	3'147
1263	20885	8.2		4	46'13	79.93	3	3'147
1264	20896	7.1		15	30.31	69.11	3 6	3.419
1265	20919	6.9		15	48.45	72.59	3	3.082
1266	20961	5.7	10 4	17	21.80	75.26	4	3.061
1267	20958	7.0		7	31.06	74.95	3	3.324
1268	20937	7.0		7	43.20	72.87	5	3.314
1269	20988	8.0		8	28.70	71.49	4	3.019
1270	21006	6.5		19	16.40	68.21	i	3.085
1271	21014	7:3	10 4	19	36.06	69.10	6	3.51
1272	21020	7.0		19	47	09.10		3.571
1273	21030	7.8			2.35	73.79	4	3.114
	21040	7.8		0			2	3.535
1274	21040	7.7		50 51	35.20	74 <sup>.</sup> 79 72 <sup>.</sup> 60	6	3.162
						•		21227
1276	21066	7:5		51	54.41	72.28	I	3.531
1277	21084	7.0		52	28.81	80.56	1	3.505
1278	21092	7.7		52	43.93	70.27	3	3.184
1279	21126	6.0	10	53	58.80	81.76	2	3.981
1280	21115	6.7	10	54	8.68	72.61	3	3°4 <sup>8</sup> 5
1281	21144	7.0	10	54	35.92	71.23	1	2.996
1282	21164	5.5	10	55	27.20	68.00	1	3.060
1283	21179	7:0		56	22.27	65.26	1	3.580
1284	21224	7.5		57	59.82	65.28	1	3'363
1285	21238	8.0	10	58	21.79	76.55	2	3.020
1286	21277	7.2	11	0	16.01	75.29	3	3.502
1287	21294	6.0	11	0	26.22	79.28	I	2.997
1288	21266	7.8	11	0	41.72	74.00	4	3.337
1289	21300	7'3	11	0	50.21	72.65	5	3.209
1290	21331	7.2	11	2	15.36	74.57	5	3.541
1291		6.0	11	2	41'		7	2.901
1292	21354	7.0	11	3	3.11	71.00	3	3.002
1293	21345	7.5	11	3	7.13	73.08	5	3.287
1294	1 - 5	8.0	11	3	16.23	83.26	I	3.000
1295	1	7.0	11	4	4.71	80.24	2	3.141
1296	21411	7.2	11	5	33.23	74'52	4	3.296
1297		6.8	111	5	43.77	72.46	8	3.304
1298		7.7	11	5	53.86	71.06	5	3.303
1299		6.0	111	5 6	18.48	75.58	3	2.971
1300		8.0	11	8	4.24	80.56	1	3.102
1201	21491	8.2	11	8	12'71	74.57	4	3.516
1301		6.2	11		13.41	74.51		3.010
1302		8.0	11	9	23.07	78.62	5 3	3.028
1303		1	11	9	49.19	72.26		3.500
1304		6.9	11	11	5.75	75.58	5 2	+3.131
1305	21553	0 9	11	11	23.90	15 20	-	1 . 3 - 9-

No.	Mean N	.P.I	). 1875·0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1261	77°	45	′ 30″•1	72.75	6	+18".08	W 781, Bn, 7yr 841, Y 4526, G
1262	80	6		75.30	I	18.98	W 782, L4 377, Gl 2809. [2808
1263	80	11	15.1	79.93	3	18.98	W 785, L 378, Gl 2811.
1264	51	0	•	67.11	7	19.00	W 894.
1265	88	18		72.29	3	19.02	W 817, T, L, 3115, Y
			70 0	1	"		[4533, Gl 2815.
1266	91	27	55.7	75.26	4	19.06	See Notes.
1267	58	48		74.95	3	19.06	W 943.
1268	59	42	12.0	72.87	5	19.07	W 945.
1269	97	42	48·8	71.49	4	19.08	W 867, Si, L, 997.
1270	88	35	49.0	68.30	2	19.11	See Notes.
1271	66	4	54.4	66.42	5	19'12	R 3403, Y 4572. [1331.
1272	. 63	50	0.2	68.31	2	19.15	W 985, T 4942, Ar 2378, N7 y
1273	84	3	32.6	73.79	4	19.13	W 887, R 3408, Sp 3989, L2 421
1274.	68	11	29.7	74'79	2	19.14	W 995. [Gl 2838,
1275	79	37	50.4	72.60	6	19.17	W 914, R 3420, L, Y [4584, Gl 2845.
1276	68	5	40.2	72.28	1	10.18	W 1019.
1277	71	30	14.6	80.26	1	19.19	1
1278	73	47	26·1	68.22	4	19.20	W 1037.
1279	103	24	48·1	81.76	2	19.23	W 951, Si, 1083, L, 884.
1280	42	45	57'3	68.25	4	19.53	
1281	101	24	37.4	71.53	1	19.24	L <sub>6</sub> 887.
1282	91	48	42.4	68.50	3	19.56	See Notes.
1283	60	23	50.7	60.33	1	19.29	W 1109.
1284	50	54	52.6	90.19	1	19.32	W. DW.
1285	93	32	40'4	73'23	3	19.33	W 1033, PM 1276, Si <sub>2</sub> , [L <sub>3</sub> 1024.
1286	68	50	29.4	75.29	4	19.38	W 1190.
1287	102	19	31.4	79.28	1	19.38	L <sub>5</sub> 917.
1288		32	18.9	74.00	4	19.39	W 1196, Y 4639.
1289		10	25.2	72.02	6	19.39	W 1203.
1290	59	16	57.2	72'10	6	19.42	W 1231.
1291	117	24	11.7	68.22	2	19.43	T 5068, Ar 2420, Oe
1292		0	3.6	71.57	3	19.44	L.020. [11175, 7Vr 867.]
1293	56	47	30.3	73.00	5	19.44	W 6, Y 4660. [Gl 2882.]
1294	86	52	10.8	83.26	1	19.44	W11, Ar 2422, Sp 4052,L <sub>2</sub> 500,
1295	78	1	14.6	78.60	3	19.46	W 25, 7 yr 870, Sp 4060, Gl 2885.
1296	54	32	4.8	74.2	4	19.49	W 62.
1297		30	5.9	73.16	7	19.49	W 73, Y 4675.
1298		29	26.8	70.02	4	19.50	W 78, Y 4676.
1299		49	12.3	75.28	3	19.21	Bn.
1300	83	19	38.2	80.56	1	19.24	W 98, L, 530, Gl 2902.
1301	•	20	0.3	74.21	4	19.55	Bn.
1302		54	40.2	70.69	6	19.57	[Gl 2907.]
1303		47	30.1	76.79	5	19.57	W 133, Sp 4092, Y 4709,
1304		<sup>1</sup> § .	57.7	73.01	4	19.60	W 180. W 186.
1305	67	8	14.0	75.58	2	+10.60	17 100.

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No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1306 1307 1308 1309	21563 21578 21579 21582	7°0 7°8 7°5 6°8	II <sup>h</sup> I2 <sup>m</sup> II I2 II I2 II I2	0"·47 48·14 53° 58·69	71.54 71.00 79.30	3 4 2	+ 3 <sup>4</sup> ·275 3·253 3·291 3·179
1310	21618	7.0 8.0	11 14	13.48	74.28	5	3.028
1311 1312 1313 1314 1315	21626 21660 21662 21665 21669	8.0 6.7 7.7 7.0 8.0	11 14 11 15 11 16 11 16 11 16	21. 8.81 9.51 30.05	73°27 78°04 72°05 70°95	3 4 6 3	3.086 3.156 3.234 3.036 3.146
1316 1317 1318 1319 1320	21688 21707 21727 21734 21753	7°2 8°0 7°2 6°5 7°0	11 17 11 17 11 18 11 18 11 19	5.08 54.11 35.43 58.31 33.83	71°50 79°53 69°67 76°89 80°26	2 4 5 5	3°158 3°167 3°666 3°213 3°174
1321 1322 1323 1324 1325	21757 21777 21822 21828 21824	6·8 7·7 7·5 7·7 8·1	11 19 11 20 11 21 11 21 11 21	43.64 30.20 38.53 39. 50.83	72·89 72·96 75·30 73·28	5 3 1 2 4	3.231 3.225 3.157 3.071 3.258
1326 1327 1328 1329 1330	21846 21858 21863 21877 21896	7.0 7.5 6.8 8.5 7.1	II 22 II 23 II 23 II 23 II 25	39.44 17.13 26.77 57.10 17.30	69·68 79·87 71·43 75·30 71·78	5 5 7 3 4	3.203 3.175 3.198 3.108 3.166
1331 1332 1333 1334 1335	21902 21922 21927 21946 21960	6·5 7·7 7·2 8·3 6·5	11 25 11 26 11 26 11 27 11 27	31.55 22.84 56.79 4.88 45.53	76·53 76·96 70·30 74·69 80·26	4 3 2 4 1	3.509 3.101 3.509 3.101
1336 1337 1338 1339 1340	21977 21987 22003 22026 22034	6·5 7·5 6·8 6·5 7·0	11 28 11 29 11 29 11 30 11 30	32'33 10'32 54'13 59'20	71.28 78.65 74.31 69.28 65.26	5 5 2 2 1	3°143 3°132 3°156 3°244 3°037
1341 1342 1343 1344 1345	22059 22067 22098 22100 22112	6·3 7·0 6·9 8·8	11 31 11 32 11 33 11 33 11 34	55.98 10.91 18.30 38.30	76.63 69.47 73.80 72.31 79.48	3 5 4 5 5	3.182 3.508 3.121 3.048
1346 1347 1348 1349 1350		6·5 7·7 7·5 7·5 7·3	11 35 11 35 11 35 11 36 11 36	35.61 43.76 43.99 1.08 50.74	69.08 78.63 65.29 75.56 73.29	5 3 1 4 2	3.132 3.085 3.030 3.080 + 3.146

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1306 1307 1308 1309 1310	53° 49′ 38*·7 56° 29° 32·7 51° 12° 48·0 68° 35° 31·6 99° 36° 39·3	71'24 71'00 66'30 75'60 74'48	3 4 5 3 5	+19"·62 19·63 19·63 19·63	W 199, Bn, Y 4720. W 214. W 215, Ar 2455. W 220. W 215, Si <sub>2</sub> , L <sub>5</sub> 980.
1311 1312 1313 1314 1315	86 53 31.7 71 52 38.9 57 29 9.9 98 9 28.2 73 46 52.3	73°27 78°04 73°79 69°53 68°22	3 4 4 4 2	19.69 19.69 19.66	L <sub>2</sub> 568.  R 3543, T <sup>2</sup> , N 7 97 1372, Y 4748, 9 97  W 273. [1059, 61 2931.]  W 250, Si <sub>2</sub> , L <sub>3</sub> 1096.  R 3546.
1316 1317 1318 1319	72 10 16·2 68 41 34·2 91 31 28·2 59 19 36·3 66 36 19·1	74.26 76.50 69.78 74.11 74.25	1 4 4 6 2	19'71 19'72 19'73 19'73	W 308, R 3557. [2940. W 290, Si., L, 3319, Gl W 330, R 3567, Bn. W 338.
1321 1322 1323 1324 1325	55 51 47.0 56 11 10.4 69 14 39.9 90 12 32.4 50 0 16.3	72.89 71.78 75.30 66.27 72.15	5 4 5 5	19·74 19·76 19·77 19·77	W 341. W 355- W 382, R 3590. See <i>Notes</i> . W 386, RC 2688.
1326 1327 1328 1329 1330	58 52 55.9 64 21 52.4 59 20 22.9 80 12 14.5 64 59 56.5	66.88 79.87 72.08 75.30 71.05	5 5 3 5	19.79 19.80 19.81 19.81	W 397, Bn. W 412. W 413, Bn. W 393, R 3608, L 453. W450, PM 1321, R 3620,
1331 1332 1333 1334 1335	53 3 44'4 55 15 29'3 24 3 30'2 81 19 51'0 105 21 20'9	76·53 76·96 68·50 74·45 75·75	4 3 3 3 2	19.83 19.84 19.85 19.85	[Bn.] W 457, R 3623, Bn, Y W 473, R 3628. [4806. [Y 4821, Gl 2980. W 446, Si,, Bn, L <sub>2</sub> 635, W 456, Bn, Si <sub>4</sub> 1112, L <sub>6</sub> .
1336 1337 1338 1339 1340	68 52 4.5 71 26 6.0 64 16 44.5 44 35 35.4 101 39 10.8	70.80 75.45 72.29 69.32 63.70	6 5 3 1 2	19.87 19.88 19.88 19.90	W 509, Bn, Y 4834. W 523. W 539, Y 4845. 12 yr 965, 6 yr 759. W 521, Si <sub>3</sub> 1379, L <sub>5</sub> 1025.
1341 1342 1343 1344 1345	55 40 54.7 50 8 7.5 98 46 25.0 65 35 58.7 80 38 5.7	76.63 68.00 73.81 71.00 79.48	3 4 4 6 5	19'93 19'92 19'90 19'90	Y 4860. W 598. W 561, Si <sub>2</sub> , L <sub>3</sub> 1179. W 632, R 3684. W 577, Sp 4215, L <sub>6</sub> , Gl
1346 1347 1348 1349 1350	84 33 38·8 106 19 28·8 86 56 38·4	69.08 78.63 60.17 75.56 73.29	5 3 1 4 2	19'94. 19'94 19'94 19'95	3007.   W 677, R 3697, Y 4896.   See Notes.   Oe 11585. [Gl 3014.   W 609, R 3705, Si., L,673,   W 698.

No.	Lalande.	Mag.	Mean R.A.	1875-0.	Epoch.	Obs.	Ann. Prec.
1351 1352 1353 1354 1355	22175 22184 22201 22220 22231	7·2 7·0 7·0 7·4 7·9	11h 36m 11 37 11 38 11 38 11 38	58°04 16.73 12.35 44° 58.65	68·29 71·32 76·49 77·71	3 5 5 5	+3°·157 3°·133 3°·143 3°·105 3°·89
1356 1357 1358 1359 1360	22229 22237 22273 22279 22285	7.0 8.5 7.5 7.8 7.8	11 39 11 39 11 40 11 41 11 41	1.69 19.05 49.77 0.03 23.50	69.08 81.78 72.30 69.31 71.30	5 2 5 1 3	3.162 3.080 3.178 3.114 3.114
1361 1362 1363 1364 1365	22289 22324 22350 22354 22359	7.5 7.5 7.7 7.1 6.2	11 41 11 43 11 44 11 44 11 44	26.63 5.22 15.28 27.87 39.42	75.93 69.30 75.21 73.54 70.64	3 2 5 4 6	3.129 3.130 3.122 3.134 3.132
1366 1367 1368 1369 1370	22363 22366 22409 22436 22450	7.5 7.2 7.5 8.3 6.5	11 44 11 45 11 47 11 48 11 48	40° 0°61 7°11 8°35 45°91	78·49 74·00 73·78 72·80	5 5 4 4	3.052 3.092 3.144 3.090 3.123
1371 1372 1373 1374 1375	22453 22455 22484 22489 22499	6·5 7·0 7·0 6·8 7·5	11 48 11 48 11 49 11 49 11 50	53.04 58.08 48.47 54.96 21.69	79.56 68.08 70.25 77.51 81.29	4 5 6 5	3.126 3.113 3.106 3.103 3.062
1376 1377 1373 1379 1380	22512 22532 22536 22541 22562	7.5 7.8 7.5 8.1 7.7	11 50 11 51 11 51 11 52 11 53	59.36 37.66 44.03 1.36 10.27	77.75 72.50 80.30 71.08 75.07	5 3 5 4	3.099 3.095 3.069 3.102 3.071
1381 1382 1383 1384 1385	22567 22575 22585 22601 22612	6.6 8.2 6.5 7.2 5.5	11 53 11 53 11 54 11 54 11 55	31.89 45.20 19.63 49.66 15.27	69·52 69·80 80·30 71·09 70·69	5 2 3 5 5	3.098 3.096 3.078 3.079 3.093
1386 1387 1388 1389 1390	22628 22632 22634 22678 22663	8·0 6·7 8·2 7·7 8·3	11 56 11 56 11 56 11 57 11 58	2.68 8.43 10.91 54.75 12.55	82·26 69·76 74·57 80·06 74·08	2 2 4 4 5	3.063 3.095 3.076 3.073 3.073
1391 1392 1393 1394 1395	22683 22697 22708	7'3 7'3 7'5 6'0 8'0	11 58 11 58 11 59 11 59 12 0	17.10 44.75 11.15 19. 17.16	69·50 73·07 80·05 73·31	5 4 4	3°079 3°077 3°071 3°080 + 3°071

No.	Mean N.P.D. 1875 0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1351 1352 1353 1354	57° 32′ 35″·7 65 17 46·6 60 38 12·2 75 2 37·2	67.00 71.82 76.49 68.23	4 4 5 2	+19"·95 19·96 19·95	W 703, Ar 2528. W708,T5378,R3714,Ar W 729. [2530, Y4905. W 740, R 3727, Y 4917.
1355 1356 1357 1358 1359	82 16 32.0 53 24 45.4 86 28 51.9 64 52 51.6 69 16 23.0	77.71 67.88 81.78 73.06 69.31	5 5 2 4	19.97 19.97 19.97	W 662, L <sub>2</sub> 686, Gl 3025. W 749, Y 4920. W 665, L <sub>4</sub> 691. W 779. W 785, Y 4935.
1360 1361 1362 1363 1364	56 48 52.8 61 57 54.8 59 48 23.2 61 12 30.6 55 42 3.2	71·30 73·28 68·94 73·00 73·54	3 4 3 6 4	19.99 19.99	W 790. W 791, R 3741. W 825. W 849.
1365 1366 1367 1368 1369	55 55 50.6 102 37 44.1 77 29 59.6 46 23 18.3 75 8 59.9	70.05 66.78 78.49 73.28 73.78	7 2 5 5 4	20.01 20.01 20.02 20.03	W 854, Bn.  W 755, Si <sub>8</sub> 1398.  W 762, R 3750, Gl 3045.  W 895, RC 2756.  W 806.
1370 1371 1372 1373 1374	52 32 48·8 50 32 47·1 63 46 53·0 60 26 46·8 62 37 31·6	71.50 79.56 69.03 69.60 75.63	5 4 4 6 6	20.03 20.03 20.03 20.04	W 925, Y 4986. W 926. W 928. W 953. W 957, Bn.
1375 1376 1377 1378 1379 1380	62 32 13'9 64 9 59'4 93 40 39'3 57 22 57'2 91 13 19'4	74.76 77.75 73.00 80.30 71.08 75.07	2 5 3 5 4	20°04 20°04 20°04 20°04 20°05	L, 1073.  W 990. W 867, Si <sub>2</sub> , Sp 4313, L, W 1001. [1263, Gl 3070. W 895, Si <sub>1</sub> , L <sub>1</sub> 3523, Y
1381 1382 1383 1384 1385	55 16 15.0 57 3 47.1 99 44 4.6 76 55 36.2 53 15 32.8	68·53 69·80 80·30 70·62 69·79	5 2 3 6 6	20.05 20.05 20.05 20.05 20.05	[5008, Gl 3076. W 1025, Y 5010. See Notes. [Gl 3080. W 926, R 3779, Y 5024, W 1066, Y 5026.
1386 1387 1388 1389 1390	101 14 16.9 46 12 4.3 81 14 1.3 84 22 18.3 86 8 29.9	71.26 70.31 74.57 80.06 73.00	1 4 4 6	20.05 20.05 20.05 20.05 20.05	$\begin{array}{lll} W \ 942,  \mathrm{Si}_{s} \ 1410,  \mathrm{L}_{s} 1094. \\ \mathrm{See} \ \textit{Notes}. & [\mathrm{GI} \ 3085. \\ \mathrm{W} \ 944,  \mathrm{En},  \mathrm{Sp} \ 4342,  \mathrm{L}_{6}, \\ \mathrm{W} \ 972,  \mathrm{L}_{z} \ 792,  \mathrm{GI} \ 3091. \\ \mathrm{W} \ 975,  \mathrm{R} \ 3801,  \mathrm{L}_{z} \ 795. \end{array}$
1391 1392 1393 1394 1395	53 44 11.6 55 33 7.5 95 9 1.5 26 22 4.5 55 44 12.3	68·51 71·75 80·05 64·08 73·31	5 5 4 5 1	20.02 20.02 20.02 20.02 420.02	W 1126. W 1138. W 994, Si <sub>1</sub> , L <sub>2</sub> 1294, See <i>Notes</i> . [Gl 3097.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1396	22755	8.0	12h 1m	9**25	70.81	4	+ 3**072
1397	22764	7.2	12 1	43.91	71.30	5	3.066
1398	22783	6.8	12 2	14.48	77'13	5	3.062
1399	22798	8.2	12 3	0.85	73.24	3	3.074
1400	22826	7.0	12 3	45'34	77.69	5	3.062
1 -4		'	3	73 37	11 - 5	3	3 3
1401	22836	7.2	12 4	6.78	70:30	3	3.028
1402	22846	7.1	12 4	28.30	74.26	4	3.020
1403	22871	7.0	12 5	11.22	79'33	4	3.021
1404	22880	6.7	12 5	39.68	71.30	4	3.024
1405	22902	7.5	12 6	31.83	72.31	4	3.048
	22027	8.0	12 7	40'11	81.80	2	
1406	22931	8.5					3.034
1407	22960			51.24	74'97	3	3.038
1408	22964	7.8	12 9	3.63	68.29	5	3.028
1409	22970	7.2	12 9	12.22	68.66	3	3.058
1410	22991	8.0	12 9	21.80	65.29	I	3.075
1411	23002	7.2	12 10	26.26	71'11	5	3.021
1412	23006	6.0	12 10	36.64	79.22	5	3.000
1413	23018	5.8	12 11	12.22	75.08	4	3.032
1414	23025	7.0	I2 II	22.78	79.31	4	3.023
1415	23051	6.2	12 12	13.12	77.82	2	3.030
1416	23074	7.0	12 12	59.35	67.80	4	2.040
		7.2	12 14		72.65		3.025
1417	23136	8.0	12 15	47.45 26.10	65.29	3 I	3.030
1418	23150	6.8	12 15	42.64	78.33		3.048
1419	23154 23159	6.2	12 15	47.62	72.64	5	3.044
1420	23-39	0.5	12 13	4,02	72 04		2.970
1421	23188	8.0	12 17	2.31	79.66	3 6	3.081
1422	23195	7.0	12 17	12.49	69.63	- 1	3.025
1423	23214	6.3	12 18	10.54	73.30	7	3.050
1424	23225	7.2	12 18	34.98	75'33	4	3.002
1425	23228	6.2	12 18	45.01	79'93	5	3.003
1426	23260	7.5	12 19	22.62	75.33	2	3.020
1427	23252	7.7	12 19	37.66	70.72	5	3.067
1428	23287	7.1	12 21	1.00	71.07	4	2.980
1429	23293	7.0	12 21	15.17	75.30	3	3.031
1430	23296	8.3	12 21	17.49	76.35	I	3.057
		#10		20:65	72:70	_	-1-00
1431	23312	7.0	12 21	30.65	73.13	5	3.088
1432		7.3	12 21	56.	74.90		3.001
1433	23334	6.2	12 22	23.36	74.82	4	3 006
1434	23354	7.0	12 23	5.28	68.79	U	2.976
1435	23373	7.7	12 23	40'			3.002
1436	23375	8.3	12 23	45'14	69.31	2	3.000
1437	23381	7.5	12 24	11.89	73.01	6	3.065
1438	23382	8.0	12 24	12.80	79.59	4	3.046
1439	23387	8•0	12 24	25'35	70.31	1	3.079
1440	23396	5.3	12 24	45.87	77.64	3	+ 3.002

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1396 1397 1398 1399 1400	84° 47′ 26″ ·o 58 15 12·5 62 48 34·8 101 9 18·7 72 52 36·1	70.81 71.30 77.13 69.80 77.69	4 5 5 4 5	+20":05 20:05 20:05 20:05 20:05	12yr 991, Bn, L <sub>2</sub> 809. W 1218, R 3828. See <i>Notes</i> . W 33, R 3841.
1401 1402 1403 1404 1405	60 14 13:0 49 24 46:1 55 2 34:7 60 45 57:6 57 30 26:1	68·12 74·56 79·33 71·31 72·31	5 4 4 4 4	20.05 20.05 20.04 20.04	W 49, Bn. W 56, PM 1385, Bn. W 77. W 96. W 114.
1406 1407 1408 1409	49 19 1.6 56 27 54.7 50 34 8.7 50 38 42.9 92 32 18.1	76·51 74·97 68·56 68·66 67·27	5 3 4 3 1	20°04 20°04 20°04 20°04	W 138. W 158. W 160. W 164. W 126, R 3886, Si, 448,
1411 1412 1413 1414 1415	49 42 46·7 105 59 57·1 60 22 9·8 74 9 35·8 59 3 9·5	71.32 79.52 75.08 79.31 77.82	4 5 4 4 2	20.03 20.03 20.03 20.03 20.02	L <sub>1</sub> 3641, Gl 3132.   W 186.   Oe 12045.   W 199, Y 5118'.   W 200, Bn.   W 225.
1416 1417 1418 1419 1420	74 45 44'I 64 16 46'3 93 4I 30'4 72 33 40'8 42 7 24'6	66.99 75.82 67.27 78.33 73.31	3 2 1 5 5	20.01 20.01 20.01 20.01	W 245, R 3904. W 228, L <sub>3</sub> 1365, Gl 3152. W 311. Oe 12583.
1421 1422 1423 1424 1425	95 25 39.6 64 42 46.1 63 43 27.3 58 16 24.4 100 55 2.8	79.66 69.63 76.12 75.33 79.93	3 6 5 4 5	19.99 19.99 19.99 20.00	W 258, Si <sub>2</sub> , L <sub>3</sub> 1376. W 338, R 3944, Bn. PM 1417. RC <sub>2</sub> 1186, L <sub>5</sub> 1149.
1426 1427 1428 1429 1430	65 57 25.3 87 15 56.0 52 55 57.2 71 28 20.9 83 9 15.3	75.33 70.72 71.32 80.30 76.35	2 5 5 2 1	19.99 19.98 19.97 19.97	$\begin{array}{c} \text{W 388, R 3964.} \\ \text{W 295, R 3967.8p 4478,} \\ \text{W 418. [L,3706,Gl 3166.} \\ \text{W 419.} \\ \text{W 325, L}_2 920. \end{array}$
1431 1432 1433 1434 1435	97 59 6·8 84 54 38·6 63 4 52·9 54 36 21·0 64 58 8·7	73.12 66.28 74.82 69.96 65.81	5 2 4 6 2	19'97 19'96 19'96 19'95	W 334, T 6624, Si. See Notes. [3180. W 440, T <sub>2</sub> , 7yr 981, Gl W 468. [5213. W 478, Ar 2688, Bn, Y
1436 1437 1438 1439 1440	64 45 39.1 85 48 3.2 79 35 30.8 93 22 13.4 64 44 30.6	65.62 73.01 79.59 67.64 77.64	3 6 4 3 3	19'95 19 94 19'94 19'94	[936. W 380, Si,, Sp 4503, L <sub>3</sub> W 381, PM 1428, T 6649. W 383, L <sub>4</sub> 1406 [R, L <sub>4</sub> 549 See Notes.

No.	Lalanče.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
1441 1442 1443 1444 1445	23397 23422 23424 23433 23453	8·5 8·2 7·3 7·7 8·0	12 <sup>h</sup> 24 <sup>m</sup> 50 <sup>s</sup> ·19 12 25 19·91 12 25 20·09 12 25 39·87 12 26 30·40	74.31 73.73 79.07 68.69 69.31	5 4 5 5	+3°·061 2·995 2·974 3·075 3·003
1446 1447 1448 1449 1450	23463 23487 23500 23506 23529	6.0 5.4 7.5 6.8 6.5	12 27 5.36 12 27 29.21 12 28 1.26 12 28 4.29 12 28 53.33	76·81 72·13 74·45 78·30 79·56	2 5 7 3 4	3°106 2°965 3°039 2°894 3°003
1451 1452 1453 1454 1455	23531 23536 23546 23570 23584	7.5 7.6 7.6 7.5	12 29 4.23 12 29 16.24 12 29 53.93 12 30 40.46	72.81 66.28 72.33 69.45 70.72	2 2 1 7 5	3·106 3·121 2·976 2·889 3·080
1456 1457 1458 1459 1460	23590 23605 23608 23618 23621	7.5 7.3 6.5 6.0 6.5	12 30 53.81 12 31 29.97 12 31 42.01 12 32 13.11 12 32 17.66	73*00 78*93 74*50 78*34 72*80	3 5 6 3 2	3.095 3.056 3.161 3.024
1461 1462 1463 1464 1465	23625 23640 23653 23659 23672	8.0 7.2 6.0 7.0 7.2	12 32 32.76 12 32 36.53 12 33 11.84 12 34 5.34 12 34 26.88	76·56 76·32 69·72 74·09 65·26	4 2 5 4 2	3.073 2.871 2.929 3.119 2.951
1466 1467 1468 1469	23681 23704 23719 23735 23740	8·1 8·0 7·5 6·8 7·5	12 34 47.06 12 35 53.07 12 36 30.82 12 37 8.68 12 37 27.90	1 . 2	2 3 5 4 4	2·932 3·127 2·954 2·963 2·964
1471 1472 1473 1474 1475	23755 23753 23780 23781 23802	6·7 7·0 7·5 7·5	12 38 6·16 12 38 9·44 12 38 55·29 12 39 5·65 12 39 40·44	72·33 80·31 76·66	5 4 1 6 5	2·909 3·141 2·951 3·087 2·915
1476 1477 1478 1479 1480	23809 23808 23838 23849 23858	8·8 6·4 7·3 8·0 7·4	12 40 0.45 12 40 1.58 12 40 55.46 12 41 3.42 12 41 36.94	75.73 71.32 70.80	5 4 4 4	3.029 3.030 3.003 2.916 2.986
1481 1482 1483 1484 1485	23869 23900 23902 23913 23903	6·8 6·0 8·2 6·2 6·5	12 41 43.81 12 42 41.67 12 43 5.17 12 43 11.71 12 43 12.11	68·53 75·84 70·52	5 4 5 4	2·931 2·954 3·046 2·938 +3·139

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1441 1442 1443 1444 1445	85° 44′ 44″·5 62 14 36·4 56 17 29·3 91 4 59·4 65 53 26·8	74.31 73.73 78.66 69.05 69.32	1 5 3 4 5	+ 19"·94 19·93 19·93 19·93	W 391, Bn, Sp 4508, W 512. [L <sub>2</sub> 942. W 514. [3755, Gl3196. W 412, Sl <sub>1</sub> , Sl <sub>5</sub> 467, L <sub>1</sub> W 537.
1446 1447 1448 1449 1450	102 8 30.5 56 3 42.6 78 23 14.6 42 33 41.3 67 25 44.1	76.81 72.13 73.56 75.32 78.92	2 5 8 4 5	19.30 13.30 13.30 13.31	[1168.] W 429, Si <sub>8</sub> 1448, L <sub>5</sub> N 7yr 1490, Gl 3204. W 449, R4027, L <sub>4</sub> 553, Gl 3206. Oe 12753, 9yr 1158. W 599, Y 5253.
1451 1452 1453 1454 1455	101 19 53.6 106 8 60 28 15.9 43 31 52.3 91 37 40.9	72.81 72.33 68.89 70.72	2 1 7 5	19·89 19·89 19·88 19·87	W 464, Si <sub>2</sub> , Si <sub>3</sub> 1452, Sp 4532, Oe 12265. [L <sub>9</sub> 1179. R 4038. Oe 12776, RC 2887. W 490, Si <sub>2</sub> , Si <sub>5</sub> 474, L <sub>2</sub>
1456 1457 1458 1459 1460	97 36 41.7 85 1 21.5 86 1 45.2 107 33 48.9 75 30 22.6	73.00 78.93 74.50 75.33 77.82	3 5 6 4 2	19.86 19.86 19.86	[3781.] W 494, Si <sub>2</sub> , [Gl 3220.] W 502, R 4051, Bn, L <sub>2</sub> 974, W 503, L <sub>2</sub> 976. [Y 5274, Gl 3224.] W 519, T 6714, R 4054,
1461 1462 1463 1464 1465	90 10 1·2 44 5 37·1 53 21 38·5 103 24 46·8 58 56 2·1	72·56 68·34 69·72 74·09 60·01	4 2 5 4 4	19.85 19.85 19.83	[3797, Gl 3225. W 522, Si,, Sp 4554, L <sub>1</sub> Oe 12830, RC 2891, see W 683, Y 5284. [Notes. W 547, Si, 1181, L <sub>e</sub> . W 708, Ar 2725.
1466 1467 1468 1469 1470	55 12 31.5 104 33 26.2 60 57 8.9 63 11 17.9 63 38 7.8	69:30 73:08 66:74 78:13 74:34	3 4 7 5 3	19.82 19.81 19.79 19.79	W 716. W 581, Si <sub>4</sub> 1184, L <sub>6</sub> . T 6749, R 4084. W 757, T 6754. R 4089.
1471 1472 1473 1474 1475	53 32 50·3 107 5 33·5 61 55 16·5 94 7 38·0 55 46 23·4	69.64 72.33 72.82 76.66 73.93	6 4 2 6 5	19.78 19.76 19.76 19.76	R 4096. Oe 12387. W 788, R 4103. W 642, Si <sub>2</sub> , L <sub>3</sub> 1444, Gl W 805. [3246.
1476 1477 1478 1479 1480	79 48 40·8 79 45 41·9 73 43 29·0 56 44 56·0 70 17 35·3	64.31 79.84 70.50 69.30 70.91	2 4 6 3 5	19.75 19.75 19.74 19.73	W 657, R 4116, Ar 2741. See Notes. W 821, Bn. W 826, Bn. W 830.
1481 1482 1483 1484 1485	59 47 6·9 64 28 25·3 84 8 38·1 61 45 59·5 105 12 0·9	71.00 68.53 75.84 70.58 76.92	3 5 4 4 5	19.72 19.71 19.70 19.70 +19.70	W 833. W 854. W 714, L,1055, Gl 3259 See Notes. [1194. W 715, Oe 12458, Si.

N	Vo.	Lalande.	Mag.	Mean R	.A. 1875·0.	Epoch.	Obs.	Ann. Prec.
I. I.	486 487 488 489 490	239°5 23919 23935 23954 23967	8.0 7.7 6.5 8.2 8.0	12 4 12 4 12 4	13 <sup>m</sup> 14 <sup>s</sup> ·19 13 16·82 14 6·88 15 1·83	81·35 67·30 80·34 70·48 73·17	2 2 4 6 6	+ 3°136 2.890 2.961 3.031 3.068
I. I.	491 492 493 494 495	23970 23980 23983 23989 23999	8·3 7·5 6·3 7·2 8·0	12 4 12 4 12 4	5 34° 5 47°17 5 59°40 6 9°59 6 36°26	70°12 79°32 77°85 74°33	5 3 6 4	2.980 2.941 2.986 2.986 3.141
I. I.	496 497 498 499 500	24027 24039 24034 24055 24063	6·5 7·0 7·0 8·0 7·7	12 4 12 4 12 4	7 22.44 7 34.86 7 48.33 8 34.16 8 44.37	71.98 75.34 65.31 76.84 70.11	3 2 1 2 5	2.971 2.773 3.126 3.136 2.765
I I	501 502 503 504 505	24061 24098 24155 24161	7.0 7.7 7.4 7.0 8.5	12 5 12 5 12 5	8 55.46 0 1.90 0 56. 12 13.87 12 32.12	74.06 73.36 72.74 77.34	4 1 5 6	2.968 3.073 3.026 3.084 3.101
I	506 507 508 509 510	24173 24164 24186 24197 24195	7.0 8.2 8.2 7.3 8.2	12 5 12 5 12 5	32.46 34.80 3 7.61 3 30.55 3 42.72	69.70 74.33 76.37 72.92 72.32	5 5 5 3	2.904 3.079 3.100 2.903 3.075
I	511 512 513 514 515	24234 24243 24247 24253 24265	6·7 7·0 7·8 7·5 6·8	12 5 12 5 12 5	54 58· 55 27·90 55 29·27 56 20·80 56 25·73	72.73 69.13 79.34 72.72	5 6 2 5	2.970 2.945 2.815 3.166 2.922
I I I	516 517 518 519 520	24275 24294 24299 24306 24320	5°5 8°0 8°0 7°0	12 12 12	67 4.67 67 26.99 67 44.70 68 14.24 69 7.58	80.00 75.36 69.52 74.08 81.35	3 4 5 4 2	3.191 3.087 3.002 3.072 3.180
1 1	521 522 523 524 525	24333 24340 24373 24407	7.5 7.4 7.6 7.7 6.8	12	59 18· 59 21·79 59 39·70 1 13·78 2 0·71	73 <sup>3</sup> 1 69 <sup>1</sup> 2 74 <sup>3</sup> 3 73 <sup>7</sup> 5	5 5 5 5	2.292 2.988 2.895 3.059 2.902
I	526 527 528 529 530	24399 24414 24468 24471 24489	6.0 6.8 6.0 7.5 7.0	13 13 13 13 13	2 1.52 2 30.92 3 52.74 4 26.37 4 35.20	78·34 70·66 67·84 65·28 72·31	5 3 2 1 2	3°123 3°035 2°783 3°182 + 2°980

No.	Mean N. P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1486	104° 23′ 50″·1	76.33	3	+19".70	W 717, Si 1195, L.
1487		63.41		19.70	W 864, Y 5351.
1488	53 59 44 <sup>.</sup> 9 66 27 10 <sup>.</sup> 8		3		[3264.
	1	80.34	4 6	19.69	
1489	0.0	69.82		19.67	W 751, Si, Sp 4634, Gl
1490	89 14 0.9	73.17	6	19.66	W757, Si,, Bn, Sp4637, L, [3881, Y5366, Gl 3266.
1491	70 5 30.3	66.39	1	19.66	[3881, Y 5366, Gl 3266. W 909, Ar 2761.
1492	63 38 42.2	70'12	5	19.66	W 917, PM 1468.
1493	72 14 44.9	77.83	2	19.65	W 919, T 6821, Ar 2765,
1494	72 12 37.2	77.46	8	19.65	See Notes. [N 7yr 1524.
1495	104 17 14.4	74.33	4	19.64	W 774, T 6827, Si, 1200,
1493	104 17 144	1433	7	1904	[L <sub>6</sub> .
1496	69 50 1.9	76.33	3	19.63	W 943.
1497	42 39 50'1	75'34	2	19.62	Oe 13086, RC 2923. [L. 1229.
1498	100 58 11.7	65.31	1	19.62	W 793, Si2, Si3 1487, Sp 4648,
1499		73.65	3	19.61	W 806, Si, 1488, L, 1232.
1500	42 32 38.2	69.06	4	19.60	Oe 13105.
~	' ' ' ' ' '	- ,	'		1 - 3 - 3
1501	69 42 17.9	72.21	5	19.60	W 968, R 4180.
1502	90 16 26.4	64.66	3	19.28	W835,Si,Si,498,L,3909.
1503	81 1 47.8	66.06	4	19.26	W 852, Si, Sp 4670.
1504	92 13 39.2	72.74	5	19.24	W870, Si2, Si5 503, Sp 4678, Gl
1505	95 24 55.7	79.92	5	19.23	W875, Sp4681, L3 1470. [3287.
-3-3	75 -4 55 7	199-	,	- 7 33	
1506	61 0 16.3	69.70	5	19.23	
1507	91 24 15.1	74'33	5	19.23	W 878, Y 5409.
1508	78 39 29.8	76.37	I	19.22	W 888.
1509	61 15 33.0	72.92	5	19.21	W 1043.
1510	90 30 42.4	68.83	4	19.21	W 902, L, 3936, Gl 3293.
1511	72 12 70	65.32	5	19.48	W 1074, Ar 2789, N 7yr
1512	68 3 25.2	72.73	5	19.48	W 1086. [1539, Gl 3303.
1513	51 16 41.1	69.13	5 6	19.47	[-337, -35 5
1514	106 12 31.1	79'34	2	19.45	Bn.
1515	65 49 45.1	72.72	5	19.45	PM 1491.
1323	03 49 43 1	1212	3	1943	122 14911
1516	109 54 42.2	80.00	3	19.44	Oe 12613, Bn.
1517	92 32 43'2	75.36	4	19.43	See Notes.
1518	78 5 49.9	68.65	6	19.42	W 974, T 6909, Sp 4714,
1519	90 3 23.6	74.08	4	19.41	L 3963. [Gl-3311.
1520	107 35 21.2	76.67	3	19.39	Oe12635.
Trar	35 28 21.2	65100	_	70100	Ar 2798, Oe 13276.
1521	1 00	65.90	5	19.39	
1522		73.31	5	19.39	W1004, Sp4725, Gl3315.
1523	62 44 38.8	68.13	5	19.38	W 1154.
1524	87 51 22.5	74.33	5	19'34	L <sub>1</sub> 3980.
1525	64 30 6.0	73.75	5	19.32	W 1194.
1526	98 18 51.9	78.34	5	19.32	W 1050, Sig, Tg, 7yr 1036, 9yr
1527	84 6 6.5	73.30	l I	19.31	W 1063, Si, Bn. See Notes.
1528	51 54 36.4	70.36	ı	19.58	W 33, R 4226, RC 2968,
1529	106 25 24.0	67.32	ı	19:27	Bn. [Y 5473, 9yr 1215.
1530		69.82	2	+10.56	W32, Gl 3329.
1 230	10 . 42 2	0902	*	1920	3-, 33-9.
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No.	Lalande.	Mag.	Mean	ı R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1531	24505	7.0	13h	4 <sup>r</sup>	47°·36	70.04	4	+ 2".922
1532	24499	6.8	13	4	56.53	74'33	4	5.811
1533	24508.	7.1	13	5	28.59	76.35	4	2.916
1534	24512	8.2	13	5	51.56	72.01	3	5.992
1535	24515	7.3	13	6	4.42	80.14	5	2.957
1536	24519	8.0	13	6	19.23	74.34	4	3.085
1537	24542	8.0	13	6	48.68	72.35	4	3.084
1538	24577	7.3	13	7 8	23.62	72.31	6	2.879
1539	24586	6.4	13		17.16	76.32	4	2.089
1540	24594	8.2	13	8	41.62	74.35	1	2.844
1541	24605	7.0	13	9	4.31	77.33	5	2.931
1542	24611	7.0	13	9	30.63	69.82	4 2	3.015
1543	24621	7.2	13	10	0.66	74'34	! !	3.077
1544	24648	7.2	13	10	31.22	76.29	4	2.928
1545	24665	8.3	13	11	2.20	70.90	5	2.840
1546	24661	7.5	13	ΙI	12'14	74.37	I	3.129
1547	24673	7.7	13	ΙI	26.30	75.86	2	2.939
1548	24672	7.8	13	ΙI	28.			2.967
1549	24711	ў·1	13	12	40.26	71.74	5	2.860
1550	24721	7.8	13	I 2	49.69	74'31	2	2.412
1551	24724	7:5	13	13	8.47	72.00	3	2.838
1552	24726	7°5 8°0	13	13	24.26	76.37	1	2.992
1553	24752 .	7.3	13	14	9.79	77.65	5	2.930
1554	24760	7.2	13	14	25.42	75`37	1	2.729
I 555	24778	6.8	13	15	30.22	74.95	5	2.729
1556	24775	8.0	13	15	40.20	76.37	I	3.046
1557	24794	7.5	13	16	0.63	69.72	2	2.854
1558	24803	6.7	13	16	24.16	71.85	4	2.810
1559	24808	7.7	13	16	39.88	77.70	2	2.821
1560	24824	7.6	13	17	20.52	73'30	I	2.020
1561	24842	7.0	13	17	43'			2.284
1562	24844	6.5	13	18	19.72	75.84	4	2.968
1563	24869	6.2	13	19	33.33	71.21	5	2.940
1564	24872	7.0	13	19	47'37	70.36	I	3.022
1565	24880	8.0	13	20	8.62	76.12	5	3.051
1566	24892	7.2	13	20	19.14	72.32	4	2.793
1567	24883	7.0	13	20	28.			3.514
1568	24917	7.7	13	21	22.18	75.27	5	3.048
1569	24918	7 <sup>.</sup> 7 6·8	13	21	56.32	80.32	1	2.989
1570	24941	6.8	13	22	31.49	69.81	4	2.780
1571	24942	8.5	13	22	54.18	72.94	5	3.032
1572	24969	6.3	13	22	58.			2.435
1573	24963	7.1	13	23	24.97	74.29	4	3.022
1574	24972	6.7	13	23	44.07	71.27	4	3.006
1575	24971	7.8	13	23	48.95	81.32	I	+3.085
					1			

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1531	68° 6′ 54″·1	66.80	6	+19"*26	W 46.
1532		74'33	4	19.26	W 51.
1533	55 1 58.0 67 24 56.0	76.35	4	19.24	W 58.
1534	78 6 54.8	70.93	5	19.53	W 61.
1535	73 12 23.6	80.14	5	10.53	W 71.
303	,,,			, ,	
1536	91 36 5.0	74'34	4	19,55	L <sub>1</sub> 4006.
1537	91 53 27.7	72.32	4	19,51	PM 1508, L <sub>1</sub> 4012.
1538	63 38 15.6	71.46	7	19.18	W 120.
1539	78 0 15.6	76.35	4	19.17	W 104, Gl 3343.
1540	59 56 6.4	69.82	2	19.19	R 4236.
			_	70175	W 137.
1541	70 25 10·1	77.33	5 6	19.12	W 137. Si, L, 1186.
1542	, ,			19.14	W 115, R 4239, L,4027.
1543	90 43 43.7	71.33	3	19.15	W 175, 16 4239, L,4027.
1544	70 26 12·8 60 17 44·6	76·59 68·90	4	10.10	W 175. W 185, Bn.
1545	60 17 44.6	08.90	5	1910	W 105, Di.
1546	98 4 20.4	74'37	I	19.10	W 160, Si, L.
1547	72 2 50.2	75.86	2	19.09	W 189, R 4250.
1548	75 34 39 2	66.73		19.09	W 165, T6122, Ar 2845,
1549	62 58 33.5	72.01	5	19.05	[Gl 3348.
1550	49 26 34.0	71.64	3	19.02	W 226.
1551	60 46 41.3	68.14	5	19.04	
1552	79 38 50.9	70.83	2	19.03	
1553	71 34 28.7	77.65	5	19.01	W 248, T 6146.
1554	51 10 53.6	75.37	I	19.01	See Notes.
1555	51 29 14.5	74.95	5	18.98	W 274, R4285, Ar 2857, [RC2999, Y 5532.
1556	86 35 12.6	76.37	1	18.97	W 236, Gl 3361.
1557	63 20 49.3	68.98	6	18.96	W 285.
1558	59 3 9.6	71.85	4	18.95	W 295.
1559	63 13 49.5	73.90	3	18.94	W 296.
1560	72 3 2.6	69.83	2	18.92	W 309.
1561	42 20 43.5	66.30	2	18.91	Oe 13583.
1562	76 55 0.8	72.24		18.90	W 275, Sp 4798, Gl 3373.
1563	73 47 5'2	70.48	5	18.86	W 352. [L,4048, Gl3378.
1564	90 32 30.8	63.66		18.85	W295,R4300,Si,Si,540,
1565	83 38 28.6	74'34	3 6	18.84	W 301, Sp4809, L₁1223,
1566	58 38 53.3	71'12	_	18.83	W 373. [Gl 3379.
1567	58 38 53.3	66.82	5	18.83	Bn. 373.
1568		1	2	18.79	W 330, S1, L2 1228, Gl
1569		75.36	4	18.78	PM 1523. [3385.
1570	79 53 25.2	80.33	6	18.77	W 418.
3,70	3 07				[Gl 3389.
1571	85 28 51.2	72.94	5	18.76	W 346, Tg, Bn, Lg 1233,
1572	36 36 19·6 88 15 15·7	60.31	2	18.76	R 4313, Oe 13654.
1573		74'59	4	18.74	Bn, L, 4062. [3393.
1574	82 10 29.9	70'29	5	18.73	W 365, Si, Y 5570, Gl
1575	91 14 52.8	73'33	2	+18.73	W 367, Sp4830, L, 4064,
				1	[Gl 3394.

No.	Lalande.	Mag.	Mean R.A	. 1875.0.	Epoch.	Obs.	Ann. Prec.
1576 1577 1578 1579 1580	25018 25042 25059 25050 25049	7.2 7.5 6.5 7.0 7.0	13 <sup>h</sup> 24 <sup>i</sup> 13 26 13 26 13 26	54**03 0*88 45*76 51*78 52*	74·38 70·81 70·57 77·86	1 4 4 4	+ 2°564 2°692 2°694 3°016 3°131
1581	25057	6.0	13 26	52.78	73.74	5	2·843
1582	25064	7.3	13 27	2.14	72.32	2	2·770
1583	25078	8.0	13 27	9.67	74.34	2	2·603
1584	25131	7.0	13 29	20.86	71.01	3	2·975
1585	25176	6.0	13 31	6.14	69.10	4	2·828
1586	25177	7.0	13 31	23.16	74.15	5	3.045
1587	25190	6.9	13 32	1.05	72.63	7	2.933
1588	25203	8.0	13 32	31.48	76.03	4	2.974
1589	25210	8.0	13 32	32.79	71.32	3	2.796
1590	25213	6.5	13 33	15.63	81.35	1	3.222
1591 1592 1593 1594 1595	25224 25232 25259 25253 25290	5.7 7.2 6.0 7.5 7.6	13 33 13 33 13 34 13 35 13 35	24.83 35.96 33.96 5.47 21.04	71.66 76.37 72.12 66.38 74.34	3 1 4 1	2.965 2.798 2.742 3.251 2.335
1596	25321	7.1	13 35	34.42	69·55	5	2·333
1597	25288	6.5	13 36	2.60	73·57	4	2·986
1598	25293	8.2	13 36	32.63	73·92	7	3·077
1599	25304	7.1	13 36	40.67	76·55	5	2·830
1600	25355	6.5	13 38	15.14	69·36	3	2·494
1601 1602 1603 1604 1605	25363 25380 25395 25394 25405	6·9 7·3 7·2 8·1 7·9	13 39 13 39 13 40 13 40	3'34 50'44 0'61 5'80 33'	74 <sup>·11</sup> 75 <sup>·37</sup> 71 <sup>·49</sup> 78·86	4 5 6 2	2.964 3.015 2.673 2.773
1606	25467	6·8	13 43	1'14	76·82	2	2.757
1607	25471	6·9	13 43	31'73	65·39	1	2.979
1608	25498	6·5	13 44	18'06	77·46	4	2.626
1609	25512	6·8	13 44	53'87	72·36	4	2.518
1610	25522	6·8	13 45	33'44	74·12	4	2.650
1611	25525	5.8	13 45	38·13	72.60	4	2.651
1612	25542	5.7	13 46	16·55	70.08	4	2.652
1613	25549	6.9	13 46	26·98	75.35	5	2.565
1614	25545	8 o	13 47	6·01	81.34	1	2.130
1615	25566	8.5	13 47	22·18	74.35	2	2.748
1616 1617 1618 1619 1620	25582 25591 25588 25625 25641	8·o 7·5 7·o 7·o 7·2	13 47 13 47 13 48 13 49 13 50	47.52 51.79 25. 13.76 21.28	65:33 66:38 69:11 80:52	1 1 4 2	2.749 2.657 3.151 2.599 + 3.033

No.	Mean N.P.D	. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1576	43° 37′	5″*9	70.32	2	+18".69	R 4328, Oe 13694.
1577		40.5	72'32	3	18.66	W 492.
1578	52 32	12.9	67.18	3 6	18.64	W 506, PM 1531.
1579	83 30	17.4	72'18	6	18.63	W428, Ar 2891, Sp4844, =
1580	96 58		60.2	5	18.63	See Notes. [L, 1250.]
1581	65 o	12.3	73'74	5	18.63	
1582	58 36	31.8	70.32	3	18.63	W 512.
1583	46 37	32.2	72.01	3	18.62	RC 3040. W 481, Gl 3408.
1584	79 9	11.0	68.74	5	18.55	W 481, Gl 3408.
1585	64 44	54.2	81.89	6	18.49	W 596.
		0.0			.,	[Gl 3412.
1586	86 58	47.2	74'15	5	18.48	W515.PM1541.L.1267.
1587	75 3	38.4	72.06	7	18.46	W 534, R 4391.
1588	79 22	58.7	73.61	4	18.44	W 542, Gl 3416.
1589	62 4	34.6	69.31	5	18.44	Bn.
1590	105 48	40.1	81.32	1	18.42	
37	3 40	T	33	_		[1093, Gl 3420.
1591	78 37	5.8	69.97	3	18.41	W 557, R 4403, T, 7yr
1592		43.1	76.37	I	18.40	W 653, R 4404.
1593	58 21	26.4	72.17	5	18.37	W 685.
1594	108 21	6.6	66.32	2	18.32	Oe 13061.
1595	36 .15	21'4	65.83	l	18.34	Oe 13869.
-393	30 .13	214	05 03	4	10 34	Oc 1300g.
1596	36 10	25.0	71.85	4	18.34	Oe 13875.
1597	80 58				18.32	W 600, R 4420, Gl 3428.
1598		38.9	73.54	5	18.30	W 611, R 4426, Si, Si,
1599	66 2	53.7	73.48 73.48	7	18.30	R 4430. [559, Sp 4894.
1600	43 51	0.7	71.35	4	18.24	Oe 13917, RC 3079.
1601	79 2	43'2	74'11	4	18.31	W 655.
1602	84 15	22.6	75.37		8.18	See Notes.
1603	54 43	29.4	69.20	5 6	18.18	W 821.
1604	62 8	48.7	73.45	4	18.17	W 822, R 4455.
1605	62 10	49.3	66.31	2	18.19	W 829, R 4458.
1606	61 29	42.4	73'32	3	18.06	W 890.
1607	8o 58	8.7	66.31	I	18.04	W 732, Si,, Gl 3450.
1608	52 44	47.8	74.95	5	18.01	W 929.
1609	46 49	18.2	72.36	4	17.98	W 942, RC 3101.
1610	54 36	27'1	74.13	4	17.97	W 953, R4491, Ar 2953,
1611	54 42	50.7	72155	_	17'07	[T <sub>2</sub> , Y 5721. W 957, Ar 2954, T <sub>2</sub> , RC <sub>2</sub> 1333,
1612	54 42	8.3	72.22 66.83	5	17.97	T <sub>2</sub> , Y 5726. [9yr 1268.]
1613	49 42	39.9	73.68	6	17.94	W 988.
1614	95 34	39.9	73.66		17.90	W 777, Si, Sp 4956, L
1615	61 44	16.7	71.67	3 3	17.89	W 1005. [1571.
1616	61 53	17.1	60.33	ı	17.88	
1617	55 35	49.4	65.31	1	17.87	W 1024. [Sig. 9yr 1273.]
1618	97 26	33.9	67:34	2	17.85	W 804, T6473, Ar 2063,
1619	52 18	54.0	67.95	4	17.82	W 1070, Y 5752. [3476.]
1620	86 24	2.8			+-17:77	W 850, Si, L, 1331, Gl

No.	Lalance.	Mag.	Mean R.A.	1875-0.	Epoch.	Obs.	Ann. Prec.
1621 1622 1623 1624 1625	25646 25645 25694 25695 25693	7.0 6.8 7.7 8.0 8.0	13 <sup>h</sup> 50 <sup>m</sup> 13 50 13 52 13 52 13 52	24°.55 25°36 24°83 48° 55°	69·95 75·37 73·35	5 5 3	+2°·725 2·763 2·662 2·901 3·125
1626 1627 1628 1629 1630	25713 25733 25723 25764 25746	7:3 7:0 7:5 6:5 6:0	13 53 13 53 13 54 13 55 13 55	20.84 48.38 0.41 6.42 9.44	77°04 68°09 74°35 74°86 72°13	3 4 5 2 5	2·757 2·385 3·035 2·539 2·964
1631 1632 1633 1634 1635	25816 25837 25836 25849 25874	7.0 7.0 6.7 6.8	13 57 13 57 13 57 13 58 13 59	24.43 50.58 50.86 17.35 3.18	70°02 77°03 72°62 78°12 65°94	3 3 4 4 5	2.978 2.916 2.934 3.038
1636 1637 1638 1639 1640	25862 25880 25896 25898 25911	4°0 7°0 6°5 7°0	13 59 13 59 14 0 14 0	15° 56°25 24°93 37°97 26°49	65·39 74·76 74·16	1 3 5 5	3·398 3·234 2·797 2·847 3·066
1641 1642 1643 1644 1645	25930 25943 25981 25957 26002	8·0 6·2 6·7 7·5 8·1	14 1 14 2 14 3 14 3	55'3° 31'71 11'98 29'47 3'32	78·85 78·01 71·61 74·38	2 3 2 4 1	2.859 2.756 2.290 3.073 2.399
1646 1647 1648 1649 1650	26000 26041 26017 26034 26040	7.2 7.0 6.6 7.7 7.0	14 4 14 4 14 5 14 5 14 6	14.58 52. 10.62 30.13 24.35	77'39 69'65 70'50 77'74	3 5 5 5	2.643 2.463 3.049 2.629 3.237
1651 1652 1653 1654 1655	26056 26089 26093 26094	6·2 8·0 6·7 7·5 7·5	14 7 14 8 14 8 14 8 14 9	14·12 5·65 35·13 59· 0·64	75.90 75.13 70.09 73.34	4 4 4 1	3.075 2.812 3.023 2.147 3.270
1656 1657 1658 1659 1660	26102 26122 26143 26165 26156	7.0 6.5 7.0 6.3 6.2	14 9 14 9 14 10 14 11 14 11	6·24 18·15 44·34 18·86 30·08	74°37 73°40 71°85 77°88 69°34	3 4 5 4 2	3·161 2·750 2·799 2·456 2·866
1661 1662 1663 1664 1665	26150 26181 26186 26200 26226	6·5 7·0 7·2 6·3 8·0	14 11 14 12 14 12 14 13 14 14	43.61 30.00 34.46 18.24 11.44	79·36 75·05 73·67 72·56 76·37	3 7 6	3.310 2.930 2.778 3.059 +2.953

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1621	60° 42′ 55″·1	70.00	6	+17".77	W 1083, Y 5758.
1622	63 28 6.2	•	i		W 1079, R4522, Y 5759.
1623	2	75.37	5	17.77	
1624		73'35	3	17.67	W 1139. [2975, N7yr1620.
		67.00	3 2		W 1141, T 6511, R 4533, Ar
1625	94 48 28.8	64.33	2	17.67	W 886, Si, Sp 4)96, L <sub>3</sub> 1590, Gl 3483.
1626	.63 34 32.9	77.04	3	17.65	W 1152, PM 1570, Y 5779.
1627	42 47 44 I	71.40	4	17.63	R 4541, Oe 14138.
1628	86 43 3.7	74'35°	5	17.62	W 906.
1629	50 21 50.3	71.68	3	17.58	W 1193.
1630	80 29 57.7	70.17	6	17.58	W 932, Gl 3490.
1631	81 51 6.1	74.86	2	17.48	W 982,RC 1348,Gl 3495.
1632	76 40 18.9	77.03	3	17.46	W 996, Gl 3496.
1633	78 6 55.7	72.27	5	17.46	W 995.
1634	87 6 7.9	78.12	4	17.44	W 1004.
1635	63 34 42.8	65.94	5	17.41	W 1284, R 4587.
			,	-, 4-	
1636	116 4 44.6	66.11	4	17.40	See Notes.
1637	103 36 20.5	60.32	I	17.37	W1035,Si, 1292,Y5827.
1638	67 14 4.8	70.24	5	17.35	W 1303.
1639	71 29 25.4	74.76	5	17.34	W 1310, R 4595.
1640	89 27 36.8	70.67	7	17.30	R 4601, Si,, Gl 3507.
1641	72 32 16.6	78.85	2	17.28	W 1342, R 4606.
1642	65 5 26.1	70.34	6	17.26	W11,N7yr1632,Y5844.
1643	41 11 40.4	67.70	3	17.23	Oe 14307.
1644	90 3 31.2	75.37	3	17.21	W25, Sp 5049, L, 4294, Gl 3514.
1645	45 39 50.2	71.36	2	17.19	W 50, RC 3144.
1646	58 9 16.7	75.13	4	17'18	W 49.
1647	48 37 48.4	65.85	2	17.15	W 72. [L1 4305, Gl 3520.
1648	88 2 57.4	71.05	6	17.14	W 51, R 4629, Si, 7yr 1133,
1649	57 32 11.1	71.00	6	17.12	W 83.
1650	103 16 19.3	74.84	6	17.08	W 73, Si,, 1297.
1651	90 15 16.2	75.90	4	17.04	See Notes
1652	69 50 3.0	75.13	4	17.00	R 4643.
1653	86 4 44.7	67.63	7	16.08	W 114.
1654	37 37 38.0	65.93	5	16.96	See Notes.
1655	105 29 58.0	73.34	I	16.96	On 13501, Y 5883.
1656	97 4 54.4	72.61	4	16.96	W 123, Si, Sp 5075
1657	65 43 47.5	73.40		16.92	W 173.
1658	69 17 38 7	74.86	4	16.88	W 196, PM 1603.
1659	49 40 30.3	77.88	4 4	16.85	W 225, Tg RC 3175 G! 3543
1660	74 9 27.5	70.34	3	16.84	W 220, T2.
1661	108 8 10.0	69.85	2	16.83	T, Bn, 9yr 1306.
1662	78 54 46.4	75.02	1	16.79	
1663	68 7 6.1	74.00	3 6	16.79	W 242, R 4654.
1664	89 2 24.9	73.97	5	16.76	W213, R46 (7, Sp 5094, L43 12.
1665	80 50 36.0	76.37	2	+16.41	W 228, Si, Gl 3554.
3	3- 3- 9	1031	•	1.0 /.	, ., ., ., .,

No	Lalande.	Mag.	Mean R	.A	1875:0.	Epoch.	Obs.	Ann. Prec.
1666	26243	6.0	14 <sup>h</sup>	14 <sup>m</sup>	39:•61	65.85	4	+2*.464
1667	26252	7.0	14	15	7.89	77.64	4	2.699
1668	26242	7.0		15	25.69	73.14	4	3.140
1669	26272	7.0		15	37.49	72.28	5	2.211
1670	26247	6.0	14	15	23.			3.456
1671	26273	7.0	1	6	22.22	71.05	6	3.073
1672 1673	26275 26311	7·8 6·1		16 17	23.26	76.88	4	3°035 2°706
1674	26369	7.2		8 8	30.30	74.68	3	2.482
1675	26335	8.0		8	18.58	73.07	3	2.671
1676	26347	7:3	14 1	8 1	26.42	60.37	ı	2.437
1677	26356	7.0		19	34.51	71.20	6	3.021
1678	26391	7.5		20	19.84	73.54	7	2.683
1679	26381	7.5		20	28.78	76.15	4	2.985
1680	26365	7.8		20	48.19	76.39	2	2.984
1681	26375	5.2 6.0	14 2	20	51.			3.498
1682	26422		14 2	22	6.22	72.98	5	3.128
1683	26445	8.0	14 2	22	26.30	74.88	2	2.673
1684	26469	7.0	14 2	23	3.10	80.37	2	2.642
1685	26474	6.2	14 2	23	5.48	75.91	4	2.488
1686	26468	7.0		23	12.27	74.87	4	2.768
1687	26453	7.5		23	23.22	60.36	I	3'277
1688	26464	6.1		23	28.25	69.18	5	3.023
1689	26483	7.5		23	59.41	80.31	6	2.835
1690	26492	6.3	14 2	24	30.00	71.30	"	2.998
1691	26525	6.8		25	42.67	80.38	1	2.811
1692	26582	6.8		26	32.72	70.87	2	2.304
1693	26543	7.0		27	6.09	60.38	1	3.306
1694	26592	6.8		28	13.		6	2.453
1695	26594	7.9	14 2	28	49.45	71.20	0	2.923
1696 1697	26607 26616	6·8 8·o	1 .	28 28	52.42	80.16	4	2.242 2.406
1698	26586	6.0		20 29	57.67	75.91 66.33	4	
1699	26624	7.5		29 29	2°45 46°29	77.59	3 5	3°392
1700	26645	6.3		30	27.94	72.07	3	2.215
1701	26670	7.5	14	31	17.67	73.89	4	2.690
1702	26665	6.0		3 I	49	,,,,		3,401
1703	26673	7.0		31	58.98	76.42	1	3.116
1704	26695	6.2		32	1.51	75.41	4	2.464
1705		9.1	14	33	25.32	75.38	1	2.955
1706	26731	6.0	14	33	30.73	70.77	5 6	2,566
1707	26721	8.3		33	53.98	76.71		2.957
1708	26747	6.0	14	34	41.34	71.20	6	2.726
1709	26769	7.7	14	35	6.49	76.41	2	2.268
1710	26736	7.0	14	35	13.26	60.38	I	+3.426

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1666 1667 1668	50° 37′ 50″·6 63 21 2·6 97 31 5·9	68·84 75·71 77·39	4 6 4	+16".69 16.67 16.66	W 292, RC 3187, N 7 yr 1655. W 297. W 248, Si <sub>2</sub> , L <sub>3</sub> , 1668.
1669	53 2 3.8	72.28	5 5	16.63	W 314. See Notes.
1671	90 3 56.6	73.38	5 4	19.91 19.91	W 271, Si <sub>1</sub> , Gl 3560. W 273, Si <sub>1</sub> , L <sub>1</sub> 4356, Gl 3561.
1673 1674 1675	64 5 40.3 52 13 38.1 62 9 35.9	72.86	6 2	16.21 16.22	W 359. T <sub>2</sub> , RC 3196, Y 5952, GI 3568. W 374.
1676	50 5 50.6	73.07	3	16.21	W 383.
1677	88 26 26 8	73.13	5 8	16.41	R 4697, L <sub>1</sub> 4376, Y 5960. W 414. W 349, L <sub>2</sub> 1440, Gl 3573.
1679	83 28 21.4 83 29 53.5	76.39	4 2	16.40	W361, Sp 5129, L21442.
1681	96 20 18.0	62·30 72·98	9 5	16.38	See Notes. See Notes.
1683 1684 1685	62 50 53·3 61 8 57·2 53 14 35·6	71.69 80.37 75.91	3 2 4	16.30 16.27	W 460. W 472. W 478, R 4719.
1686	68 40 27.6	74.87	4	16.27	W 474.
1687 1688 1689	104 41 32.6 88 36 47.0 73 13 59.6	60.36 72.15 80.31	4 1	16.52 16.52 16.52	W 402, Si <sub>4</sub> 1318. See <i>Notes</i> . W 487.
1690	84 40 15.5	73.60	5	16.50	W 427, R 4724, Si, Sp
1691 1692 1693	71 48 5·1 46 3 49·8 106 16 3·4	80.38	3	16.00	W 522. W 550. Oe 13727.
1694	106 16 3'4 52 29 13'9 79 33 55'0	65.31	1 2 5	16.00	W 580, T <sub>2</sub> , RC 3219, Y W 504. [6009.
1696	56 54 58·6 50 30 41·5	80.16	4 4	15.97	W595,R4749,T <sub>2</sub> ,Gl <sub>3</sub> 607. W 599.
1698	111 37 46.5	66.33	3 5	15.96	Oe 13745. W 527, Gl 3612.
1700		72.07	3	15.89	R 4763. W 633.
1702	64 59 32·8 111 47 11·6 93 4 5·4	73.89 65.82 72.39	4 2 2	15.80	Oe 13780. [4444. W 564, Si, Sp 5192, L
1704	53 31 36.6	75.38 75.38	4 1	15.43	W 656, R 4770. W 592, L <sub>2</sub> 1502.
1706	45 49 4°4 82 7 11°3	70.77	5 6	15.70 15.70	See Notes. W 598, L <sub>2</sub> 1505, Gl 3622.
1708	67 29 15.7 58 56 24.6	73.00 73.72 60.35	5 3	15.63 +15.63	W 703, R 4779. W 718. Oe 13848.
1	33 23 9	00 35	1	1 - 3 - 3	<u> </u>

No.	Lalande.	Mag.	Mean	R.A.	1875-0.	Epoch.	Obs.	Ann. Prec.
1711	26781	9.0	14 <sup>h</sup>		47*.76	73'39	1	+2*.781
1712	-6	6.0	14	36	0.			3.455
1713	26794	7:5	14	36	3.87	71.69	3	2.481
1714	26812	8.0	14	36	46.80	77.39	3	2.944
1715	26851	6.8	14	37	35.96	74.51	5	2.426
1716	26826	7.5 6.0	14	37	36.39	70.77	5	3,188
1717	26869	6.0	14	38	45.87	76.40	4	3.086
1718	26914	7.2	14	39	53.79	68.88	4	2.864
1719	26923	6.6	14	39	59.91	65.39	1	2.207
1720	26926	7.2	14	40	43.77	75.40	5	3.049
1721	26929	6.2	14	41	5.75	69.88	2	3.561
1722	26957	8.5	14	42	3.91	74.00	5	3.175
1723	26975	6.7	14	42	28.86	76.42	1	3.077
1724		6.2	14	42	57			3.225
1725	27004	7.0	14	43	22.75	71.63	4	2.000
1726	26995	6.0	14	43	46.			3.312
1727	27055	5.8	14	44	40.48	69.31	I	2.673
1728	27103	7.9	14	46	33.61	76.81	5	2.778
1729	27120	6.8	14	46	55.22	69.55	6	2 670
1730	27114	7.2	14	47	3.41	73.50	5	2.823
1731	27134	7.8	14	47	25.99	74.60	4	2.618
1732	27161	7.5	14	48	57.67	69.99	5	2.817
1733	27177	7.5	14	50	13.			3*493
1734	27242	6.3	14	50	48.06	70.72	3	2*488
1735	27233	6.0	14	51	8.			3.064
1736	27297	6.2	14	53	8.72	69.89	2	2.991
1737	27324	7.0	14	53	13.53	75.21	5	5.126
1738	27304	6.8	14	53	17:30	77'41	2	2.651
1739	27325	7.2	14	54	4.95	71.28	5	2.820
1740	27343	8.3	14	54	29.13	79.13	4	2.289
1741	27358	6.2	14	54	38.29	69.17	5	2.294
1742	27342	7.1	14	55	2.			3.111
1743	27374	7.3	14	55	16.24	74.67	4	2.491
1744	27363	7.2	14	56	5.09	60.36	I	3.360
1745	27406	7.0	14	56	45.34	78.00	5	2.795
1746	27403	8.0	14	57	0.80	72.10	5	3.049
1747	27435	7.1	14	57	23.03	73.89	2	2.446
1748	27445	7.0	14	57	46.48	68.98	5	2.228
1749	27470	7.5	14	58	48.98	72.71	3	2.724
1750	27509	7.0	14	59	55.20	70.02	5	2.303
1751	27496	7.2	15	0	6.58	75.05	3	2.972
1752	27507	7.1	15	0	48.13	73.89	4	3.025
1753	27532	8.0	15	I	11.26	68.79	5	2.890
1754	27575	6.1	15	I	41.09	75.42	4	2.356
1755	27572	4.8	15	I	48.75	79.72	3	+2.620

1711	No.	Mean N.P.D. 1875-0	Epoch.	Obs.	Ann. Prec.	Authorities.
1712	1711	70° 58' 40":6	72'20	,	+ I 5":60	W 726
1713						See Notes
1714		70 58 2:8	1			W 742
1715						PM 1647
1716						
1717	1715	52 42 30 9	73.00	5	15 50	W 700, 114003, 1 <sub>2</sub> , 1 0005.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						
1719					15.43	W 695, Sis 638, L1 4479, G1
1720					15.32	W 722, GI 3047. L3042.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						W 839, Y 6080.
1721	1720	88 30 10.4	75.40	. 5	15.32	
1722	1721	102 18 42.1	69.86	2	15.30	
1723	1722	96 35 3.7	74.00	5		W 759, Si <sub>2</sub> , L, 1782, Y
1724	1723					
1725						
1726	1725					W 790,Sp 5259, Gl 3658.
1727	77.06		((.0.	_		
1728		,0 0 0				
1729						W 945, see Notes.
1730         74         21         14'4         73'20         5         14'96         W 992, R 4844.           1731         63         1         19'5         75'88         4         14'94         W 1004.           1732         74         9         57'6         74'14         4         14'85         W 1029, R 4856.           1733         114         56         11'6         66'38         3         14'77         W 1079. [1204 B 314.           1735         89         39         46'5         67'18         5         14'74         W 1079. [1204 B 314.           1736         84         55         57'0         69'89         2         14'60         W 983, Si., L, 1596, Gl           1737         45         1         54'6         75'21         5         14'59         W 1148, Oe 14991, RC           1738         65         19         50'5         77'41         2         14'59         W 1148, Oe 14991, RC           1739         74         40         4'7         71'58         5         14'54         W 1155, R 4893.           1742         92         39 54'4         62'39         4         14'48         W 1172.           1744				5		w 983.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						R 4842.
1732	1730	74 21 14'4	73.50	5	14.96	W 992, R 4844.
1732	1731	63 1 19.5	75.88	4	14.04	W 1004.
1733	1732			1	14.85	W 1029, R 4856.
1734         57         11         36'5         75'90         2         14'74         W 1079. [1204 B 314. W 945, 75978, Ar3141, Si, 12y W 945, 75978, Ar3141, Si, 1250, Ar3169, Gl Gl Gr	1733					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		57 11 36.5				W 1079. [1204 B 314.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		89 39 46.5		5		W 945, T6978, Ar3141, Si, 12yr
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1726	84 55 57.0	60:80		14.60	
1738         65         19         50·5         77·41         2         14·59         W 1140, R 4885. [3294.           1739         74         40         4'7         71·58         5         14·54         W 1155, R 4893.           1740         62         20         36·2         79·13         4         14·52         W 1172.           1741         49         51         27·2         71·37         4         14·51         W 1182, T.         PM 1677, Ar 3150.           1742         92         39         54·4         62·39         4         14·48         W 1194, Ar 3155.         OU 14/92, 7 yr 1191, St.         W 1194, Ar 3155.         W 1194, Ar 3155.         OU 14/92, 7 yr 1191, St.         W 1211.         [596.           1746         88         37         4'8         75·15         4         14·36         W 1211.         [596.           1746         88         37         4'8         75·15         4         14·36         W 123.3.         R 4919.           1748         61         14         30·3         68·96         5         14·32         R 4919.           1750         50         54         31·6         72·41         4         14·18         W 1285.				- 1		
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1/40	02 20 30 2	79 13	4	14 52	" 11/2.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		49 51 27.2	71.37	4	14.21	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1742	92 39 54.4	62.39	4	14.48	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1743	57 53 29.5	70.12	8	14.47	W 1194, Ar 3155.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1744		66.33	I	14'42	Oe 14192, 7 yr 1191, St <sub>i</sub>
1747	1745	73 27 20.3	78.00	5	14.38	W 1211. [596.
1747	1746	88 37 4.8	75'15	4	14.36	W 1054, Si,, L, 4583.
1748		01 1				
1749   69 40 14'2   71'38   4   14'25   W 1260.   W 1285.   Gd 3720.     1751   83 57 52'5   79'86   2   14'17   W 1112,R 4934,L <sub>2</sub> 1629,   1752   87 9 12'7   73'89   4   14'13   W 1123,R 4938,Sii,Sp 5370.   1753   79 13 17'7   68'59   5   14'11   W 135,Ar 3169,Gd 3723.   1754   53 3 44'3   75'42   4   14'08   W 1326.   W 1326.					14'32	
1750 50 54 31.6 72.41 4 14.18 W 1285.  [Gl 3720.] 1751 83 57 52.5 79.86 2 14.17 W 1112,R 4934,L, 1629, 1752 87 9 12.7 73.89 4 14.13 W 1123,R 4938,Si,Sp.5370. 1753 79 13 17.7 68.59 5 14.11 W 1135,Ar3169,Gl 3723. 1754 53 3 44.3 75.42 4 14.08 W 1326.						
1751 83 57 52:5 79:86 2 14:17 W1112,R 4934,L <sub>2</sub> 1629, 1752 87 9 12:7 73:89 4 14:13 W1123,R 4938,Si,Sp.5370. 1753 79 13 17:7 68:59 5 14:11 W1135,Ar3169,Gl3723. 1754 53 3 44:3 75:42 4 14:08 W1326.						W 1285.
1752     87     9     12.7     73.89     4     14.13     W 1123, R 4938, Si1, Sp 5370.       1753     79     13     17.7     68.59     5     14.11     W 1135, Ar 3169, Gl 3723.       1754     53     3 44.3     75.42     4     14.08     W 1326.	1751	82 57 5015	70186		7.417.7	W 1112 R 4024 L 1620
1753 79 13 17.7 68.59 5 14.11 W1135, Ar3169, Gl 3723.						
1754 53 3 44.3 75.42 4 14.08 W 1326.						
-133 34 30 300 79 40 2 714 07 500 17000.		64 28 26.6				
	-133	34 30 300	79 40	4	T14 07	2.000.

No.	Lalande.	Mag.	Mean R.A.	1875-0.	Epoch.	Obs.	Ann. Prec.
1756 1757 1758 1759 1760	27564 27563 27599 27628 27644	8·0 6·5 6·8 7·0 7·8	15 <sup>h</sup> 2 <sup>n</sup> 15 2 15 3 15 3	33.94 12.14 15.98 53.47	75.60 60.36 67.17 75.02 80.31	5 5 5	+2*.999 3.486 2.999 2.421 2.431
1761 1762 1763 1764 1765	27652 27665 27704 27705	6.8 6.5 8.0 7.3 7.2	15 4 15 4 15 5 15 5 15 5	21.51 33.22 12.65 38.36 55.04	70°18 76°91 79°01 79°01	5 4 4 5 5	1.902 2.865 3.015 2.520 2.709
1766 1767 1768 1769 1770	27718 27725 27744 27777 27763	5.9 6.8 7.0 8.0 6.5	15 6 15 6 15 7 15 7 15 8	23.00 31.11 35.62 41.09 15.37	72.59 80.32 66.99 78.90 74.62	5 1 5 2 5	2·729 2·664 3·087 2·351 3·158
1771 1772 1773 1774 1775	27822 27781 27813 27817 27846	7.0 6.0 7.1 7.1 6.8	15 8 15 9 15 9 15 9 15 10	40.78 8. 33.54 44.04 17.64	72.07 71.19 80.32 70.40	5 5 1 3	1 '942 3'467 2'888 2'952 2'589
1776 1777 1778 1779 1780	27904 27884 27910 27942	6·8 6·2 7·9 8·7 7·0	15 11 15 12 15 12 15 12 15 12	35.11 1.26 9.10 9.	75°41 80°40 76°42 73°60	4 2 3 5	2·310 3·0 <b>72</b> 2·555 1·828 2·466
1781 1782 1783 1784 1785	27943 27950 27957 27976 27990	6·5 6·5 6·5 7·6 6·8	15 12 15 14 15 14 15 14 15 14	59'48 1'30 20'14 22'28 27'50	69·19 68·21 79·63 74·82 76·77	5 6 4 5 3	2.557 3.154 3.107 2.772 2.422
1786 1787 1788 1789	28028 28035 28027 28012 28056	7°3 7°0 7°7 7°0 7°7	15 15 15 16 15 16 15 16 15 16	46.19 8.93 8.99 29.21 50.22	71°40 67°40 76°65 60°36 77°17	5 4 4 1	2·444 2·606 2·764 3·364 2·586
1791 1792 1793 1794 1795	28036 28064 28083 28118 28148	6.0 7.3 7.5 7.5 7.5	15 17 15 17 15 17 15 19 15 19	2.98 30.48 18.63 37.94	75°39 71°17 71°60 81°39	2 5 5	3.286 2.576 2.521 3.086 2.248
1796 1797 1798 1799 1800	28117 28139 28164 28152 28153	7.0 7.3 5.9 6.8 7.0	15 19 15 19 15 19 15 20 15 20	39.56 49.64 52.27 15.95 29.69	67.02 76.83 69.77 74.21 80.40	3 5 5 5 2	3.436 2.589 2.023 2.701 +2.883

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
		1	1		1
1756	85° 35′ 17″·o	75.60	5	+14"*05	W1152, Si, Sp 5380, L2
1757	113 30 23.7	65.41	5 6	14.03	See Notes. [1642, Gl3727
1758	85 39 16.1	70.51	5	13.98	W 19, Si, L, 1645, Gl
1759	55 48 51.6	75.02	5	13.98	[3735.
1760	56 15 25.5	80.22	I	13.94	Bn
1761	39 27 58.8	70'18	5	13.91	Oe 15137, RC 3330.
1762	77 51 6.0	76.91	4	13.90	W 44, R 4963, Sp 5399, Gl 3740.
1763	86 41 50.9	71.66	4	13.85	W 56, T 7085, L, 1654.
1764	60 17 45.2	79.01	5	13.83	R 4971, T2, Y 6251, Gl
1765	69 28 58.4	73.91	4	13.81	W 95. [3745.
					1713.
1766	70 33 7.7	72.29	5	13.78	W 106, R 4976, N 7 yr
1767	67 12 49.4	80.32	I	13.77	W 113, T 7101.
1768	90 21 21.5	68.38	5	13.41	See Notes.
1769°	53 33 29'2	78.90	2	23.70	W 150, R 4990.
1770	95 2 11.0	74.62	5	13.66	W113,Si <sub>2</sub> ,L <sub>3</sub> 1895,Gl3754
1771	40 57 6.6	74.91	4	13.63	[6yr958, 7 yr 1212. Oe 15196, 12 yr 1229,
1772	111 56 8.7	64.40	4	13.60	See Notes.
1773	79 24 29.5	71.10	5 5	13.28	W 142, Gl 3758.
1774	83 4 14.1	80.32	) I	13.26	W 147, Si, L, 1675, Gl
1775	63 53 38 1	70.40	3	13.23	W 197, R 5008. 3760.
1//3	03 33 30 1	7040	3	13 33	11 197, 10 3000. [3700.
1776	52 28 13.6	75.08	3	13.45	See Notes.
1777	90 0 11.3	80.40	2	13.42	L, 4681.
1778	62 31 27.4	76.43	2	13.41	W 243.
1779	38 36 16.3	62.64	4	13.41	Ar 3197, Bn.
1780	58 42 23.6	73.60	5	13.36	W 261.
1781	62 42 16.8	69.20	5	13'35	W 263, PM 1709.
1782	94 39 55.9	70.87	4	13.50	W 242, Si2, Sp 5435, L3 1925,
1783	91 57 17.1	74.63	4	13.27	L, 4702, Note. [GI 3774.
1784	73 21 36.0	73.92	6	13.26	W 286.
1785	57 1 50.0	76.77	3	13.26	W 295.
06					Wash
1786	58 4 25.0	70.02	6	13.17	W 326. W 333, R 5045.
1787	65 12 23.8	68.07	3	13.12	W 333, R 5045. W 329.
1788	73 2 55.0	74.81	5	13.12	Bn 329.
1789	106 6 55°1 64 18 26°5	60.34	I	13,13	W 352.
1790	04 10 20 5	77.17	4	13.10	
1791	101 55 16.6	66.14	4	13.09	Ar 3208, N 7 yr 1733.
1792	63 55 39 2	75.39	2	13.09	W 359, R 5056.
1793	61 29 44.9	71.17	5	13.00	W 362.
1794	90 48 44.2	73.16	4	12.94	W 334, Si,702, L, 4735
1795	51 21 58.0	81,39	I	12.92	R 5072, 12 yr 1248, Y [6348.]
1796	109 33 55.3	72.88	2	12.91	Oe 14559.
1797	64 44 18.2	76.83	5	15.00	W 404.
1798	44 17 10.5	69.77	5	12.89	W 420, Oe 15347.
1799	70 4 44.4	74'21	5	12.87	W 418, Ar 3218.
1800	79 31 26.9	80.40	2	+12.86	W 357, Sp 5474, Gl 3798.

No.	Lalande.	Mag.	Mean R.A. 18	75.0.	Epoch.	Obs.	Ann. Prec.
1801 1802 1803 1804 1805	28157 28211 28265 28235 28212	8·o 6·o 6·5 6·8 6·8	15 23 E	6·35 8·52 4·87 2·88	72'42 70'27 70'62 78'03 60'35	4 7 4 5 2	+ 3 <sup>4</sup> ·225 2·578 1·623 2·824 3·456
1806 1807 1808 1809 1810	28244 28271 28270 28283 28318	7:3 6:9 6:7 7:8 6:5	15 24 28 15 24 5 15 25 2	7°12 8°73 1°50 1°47 3°57	76.42 70.01 80.85 72.09 71.15	4 5 2 6 6	2·531 2·603 2·907 3·048 2·278
1811 1812 1813 1814 1815	28329 28347 28350 28369	8·2 6·5 6·5 7·0 7·8	15 26 3 15 27 15 27 4	7'92 7'00 2' 4'54 5'75	77.18 71.06 78.43 73.40	4 6 3 2	2.662 2.280 3.622 3.169 3.067
1816 1817 1818 1819	28405 28434 28474 28460 28496	8.0 7.5 5.0 7.0 6.5	15 29 3 15 30 1 15 30 3 15 30 5	7.23 5.08 9.04 5.01	72.41 60.38 73.09 77.73 74.17	1 1 3 3 4	3.063 3.176 2.195 2.780 2.216
1821 1822 1823 1824 1825	28505 28514 28537 28498 28571	6·5 7·7 8·1 5·5 7·6	15 31 4 15 32 2 15 32 4 15 32 5	6·45 3·12 8·50	77.42 72.67 77.74 78.94	4 4 2 2	2.446 2.643 2.441 3.536 2.402
1826 1827 1828 1829 1830	28572 28601 28553 28589 28640	6.5 5.5 8.0 7.5 6.6	15 34 I 15 34 I 15 34 5	5.84 6.20 8.57 60.95	68·99 77·95 70·05 73·50 74·63	5 2 6 5 5	2.835 1.910 3.331 2.699 2.230
1831 1832 1833 1834 1835	28612 28607 28685 28699 28673	7.5 6.8 7.8 7.3 6.1	15 36 2 15 37 15 37 4	8·62 2·55 8·38 41·63 44·60	80·35 76·00 76·44 76·63 80·42	2 5 2 5 1	2.916 3.272 2.241 2.390 3.017
1836 1837 1838 1839 1840	28719 28716 28729 28737 28734	7°3 6°7 7°0 8°2 7°0	15 39	45 <sup>22</sup> 12 <sup>7</sup> 4 24 <sup>50</sup> 4 <sup>8</sup> 1 7 <sup>0</sup> 1	77.44 73.22 71.08 76.03 80.31	5 3 5 1	2°568 2°960 2°647 2°947 3°184
1841 1842 1843 1844 1845	28782 28759 28770 28805 28780	7°2 7°0 8°1 7°3 6°5	15 41 3 15 42	6.93 28.04 35.30 8.09 43.40	74'93 73'93 74'93 75'67 69'59	2 2 6 4 5	2'131 3'328 2'982 2'409 +3'420

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1801 1802 1803 1804 1805	98° 30′ 40″·2 64 27 43·6 35 32 35·7 76 32 5·3 110 17 47·0	72'42 68'24 70'05 78'03 65'45	4 12 6 5	+12".83 12.74 12.68 12.67 12.66	W 360. L <sub>3</sub> 1955. [3224. W 463, T 7223, R 5074, Ar Oc 15391. W 415, Gl 3809. Oc 14605.
1806 1807 1808 1809 1810	62 25 49.6 65 45 7.4 80 59 32.7 88 41 11.0 52 46 6.1	76·42 70·01 80·85 72·09 76·17	4 5 2 6 4	12.66 12.59 12.56 12.50	W 496. W 435, Si <sub>1</sub> , L <sub>4</sub> 1581, Gl W 435, Si <sub>5</sub> , Sp 5503, L <sub>1</sub> 4768, W 555, R 5119. [Gl 3813.
1811 1812 1813 1814 1815	68 37 59°1 52 57 23°0 117 37 26°3 95 16 26°3 89 43 36°7	77.18 70.90 65.90 73.45 71.73	4 5 4 3 3	12.45 12.44 12.41 12.45	W 572. W 579, Y 6397. See <i>Notes</i> . W 486, Si <sub>3</sub> . W 502, L <sub>1</sub> 4786, Gl 3832.
1816 1817 1818 1819 1820	89 30 57.6 95 36 40.0 50 34 23.6 74 39 36.8 51 12 39.4	72·41 65·45 73·09 77·73 74·17	3 3 3 4	12.12 12.14 12.14 12.23	W 526, L <sub>1</sub> 4793, Gl 3836. W 538, Si., L <sub>3</sub> 1991. W 690, R 5136, 129r 1273. W 683. [79r1240, Y6432. W 705.
1821 1822 1823 1824 1825	59 35 37.4 68 8 55.5 59 29 14.1 113 24 36.2 58 2 23.8	77'42 72'67 77'74 65'91 78'94	4 4 3 4 2	12.01 15.01 15.04 15.00	W 717. W 733. W 751, PM 1737. See <i>Notes</i> . W 782.
1826 1827 1828 1829 1830	77 32 26·5 42 47 21·7 103 33 55·7 70 55 26·8 52 4 42·9	68·82 72·42 72·90 73·00 74·63	5 5 5 5	11.91 11.90 11.87 11.80	W 639, Sp 5557, Gl 3857. Ar 3264, RC 3424, RC <sub>3</sub> 1503, W 631, T 7310, Si <sub>4</sub> 1429, L <sub>5</sub> W 810. [1892, W 862, R 5156, Y 6475.
1831 1832 1833 1834 1835	81 46 42·2 100 31 23·8 52 33 5·3 57 53 31·6 87 4 57·4	80·35 76·00 76·44 76·63 69·66	2 5 2 5 4	11.78 11.76 11.71 11.67 11.66	L <sub>2</sub> 1793. Y 6479, Note. R 5162, Bn. W 909. See Notes.
1836 1837 1838 1839 1840	65 8 38·9 84 9 32·1 68 43 27·7 83 29 49·4 95 43 50·1	77'44 73'22 68'22 76'03 80'31	1 5 5 5 1	11.20 11.22 11.20	W 938. W 960. W 752, $L_{9}$ 1818, $Gl_3876$ . W 747, $Si_8$
1841 1842 1843 1844 1845	49 25 53.7 103 6 44.5 85 18 49.8 59 2 45.5 107 31 5.9	72.08 71.75 74.93 75.67 69.59	3 3 6 4 5	11.42 11.32 11.32 11.35	W 774, Si <sub>4</sub> 1439. W 781, Gl 3883. W 1027, R 5174. Oe 14920.

No.	Lalande.	Mag.	Mean R.A	. 1875·0.	Epoch.	Obs.	Ann. Prec.
1846	28829	6.2	15 <sup>h</sup> 43		78.41	2	+ 2**607
1847	28804	5.2	15 43			_	3.257
1848	28873	6.2	15 43		73'47	I	1,050
1849	28863	7.3	15 44		76.64	5 6	2.27
1850	28847	6.0	15 44	39.28	72.89	0	3.344
1851	28918	7.5	15 45		77.17	4	1.962
1852	28878	5.5 7.8	15 46				3.201
1853	28914		15 46		69.42	2	2.536
1854	28910	8.0	15 46		71.41	5	2.760
1855	28891	6.2	15 46	29.70	66.39	I	3.260
1856	28929	7.5	15 47	12.16	76.43	1	2.755
1857	28934	6.2	15 47				2.413
1858	28955	7.2	15 48		67.73	3	2.061
1859	28975	8.9	15 48	47'			2.895
1860	28991	6'2	15 49	4.04	78.36	2	2.648
1861	28987	7.0	15 49	26.35	74'95	2	3.107
1862	28980	6.0	15 49		71.50	5	3.362
1863	29021	8•0	15 50		75.70	4	3.079
1864	29074	8.0	15 50		76.47	1	2.119
1865		3.2	15 51				3.918
1866	29073	7:3	15 52	17.11	77.24	5	2'971
1867	29070	8.3	15 52		72.83		3.156
1868	29120	6.5	15 53		67.89	5 6	2.119
1869	29100	8.1	15 53		79.46	2	2.738
1870	29110	6.2	15 54		80.37	3	3.535
1871	29143	7.0	15 54	2.86	77.25	5	2.419
1872		var.	15 54		66.39	3	2.209
1873	29138	6.1	15 54		73.41	2	2.977
1874		6.0	15 55	47			3.619
1875	29199	7.7	15 55	51.71	77'43	3	2.201
1876	29223	6.2	15 56	8.56	74.47	3	1.940
1877	29190	7.8	15 56	18.67	69.83	5	3.073
1878	29226	6.7	15 56	28.70	70.60	5	2.152
1879	29242	6.8	15 57	21.92	74.04	5	2.294
1880	29259	7.9	15 58		75.38	3	3.088
1881	29268	6.2	15 58	35.93	73.60	5	3,136
1882	29341	7.0	15 59		74'24	5	2.777
1883	29317	6.8	15 59		78.19	4	2,001
1884	29349	7.0	16 0		70'40	5	2.598
1885		6.0	16 0				3.638
1886	29378	7.0	16	53.72	74.45	2	2.330
1887	29362	8.1	16	14.62	72.44	3	2.996
1888	29410	6.2	16 1		77*25	I	2.598
1889	29407	7.5	16 2	2.64	76.44	I	2.737
1890	29448	7.5	16	9.84	76.28	6	+ 2.735

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1846	67° 11′ 55″ 3	78.41	2	+11".28	W 1050.
1847	115 22 10.3	63.68	4	11.25	See Notes.
1848	43 52 55.9	66.41	ī	11.53	
1849	65 56 47.3	76.64	5	11.50	W 1074, R 5187.
1850	103 45 18.2	73'74	5 6	11.12	W 839, Si., 1417, Sp 5608.
1851	45 5 53'2	77'17	4	11.09	W 1130, Oe 15682.
1852	114 57 6.1	65.91	4	11.00	See Notes.
1853	64 19 6.6	73.42	1	11.02	W 1129, R 5205.
1854	74 23 0.8	71.41	5	11.02	W 1126, Bn.
1855	113 36 12.9	66.39	I	11.03	See Notes.
1856	74 11 40.7	68.41	2	10.08	W 1149. [Ar 3309.
1857	72 13 20'7	65.45	2	10.97	W 1154, T7388, R 5212,
1858	84 20 13.5	69.43	3	10.00	W 898, Si <sub>1</sub> , Sp 5630, L <sub>2</sub>
1859	81 2 48.8	65.77	3	10.86	See <i>Notes</i> . [1863.]
1860	69 19 17*4	78.36	2	10.84	W 1204, T 7404, R 5225, Ar
1861	91 47 43'4	74'95	2	10.82	[3316, Gl 3916.] See Notes.
1862	104 27 42'2	71.50	5	10.81	W 916, R, Si4 1454, L5 1925.
1863	90 22 51.8	75.86	5	10.43	W 940, Si <sub>5</sub> 763, Sp 5643,
1864	49 51 2.8	76.47	1	10.72	W 1254. [L,4920, Gl3924]
1865	115 45 8.7	64.40	5	10.68	See Notes.
1866	84 53 7.0	77.24	5	10.61	W 973, Sp 5649,Gl 3931.
1867	92 42 57.4	72.83	5	10.60	See Notes.
1868	49 56 46.9	68.79	5	10.22	W 1316, RC3476, Gl3934
1869	73 25 41.8	79.46	2	10.24	W 1304, N 7yr 1800.
1870	98 3 23.2	80.37	3	10.48	See Notes.
1871	60 12 34.4	77.25	5	10.48	W 1340.
1872	63 43 28.6	66.39	3	10.45	See Notes.
1873	85 13 16.9	72.77	3	10.43	See Notes.
1874	115 30 52.3	61.00	2	10.34	See Notes.
1875	63 28 36.9	77.43	3	10.34	W 1389, N 7yr 1809.
1876	45 21 56.3	74.47	3	10.35	W 1406. [Gl 3946.
1877	90 3 49.6	69.10	3 6	10.31	W1043,Sp5673,L14954,
1878	50 28 16.5	70.60	5	10.59	W 1408, RC 3482.
1879	67 24 47.2	74'04	5	10.55	
1880	90 48 57.3	80.34	2	10 16	L <sub>1</sub> 4967. See Notes.
1881	93 11 6.3	73.70	4	10.13	W1090,L32103,Gl3958.
1882	55 28 43.3	74.24	5	10.07	W 1496. [3963.
1883	81 33 45.0	78.19	4	10.06	W 1114, Si, L, 1934, Gl
1884	67 45 48.3	70.40	5	10.01	W 1511.
1885	115 59 20.3	61.09	3	9.99	See Notes.
1886	57 24 43.9	77.45	2	9.96	W 1546. [3968.
1887	86 15 15.0	72.44	3	9.93	W 1149, Si, L, 1943,Gl
1888	67 50 24.4	77'45	I	9.88	W 1569.
1889	73 57 14.8	76.44	I	9.87	
1890	73 52 18.5	76.58	6	+9.79	
		1	1		

No.	Lalande.	Mag.	Mean	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1891	29440	5.2	16b		18**07	71.41	5	+ 3":136
1892	29441	7.0	16	3	10.80	68.42	5	3.049
1893	29457	7.0	16	3	52.60	78.82	5	3.033
1894	29496	7.5	16	4	9.26	75.13	3	2.556
1895	29474	8.0	16	4	20.60	70.44	3	3.013
1896	29533	8.1	16	5	46.90	74.78	3	2.481
1897	29543	7.3	16	5	58.97	76.78	3	2.468
1898	29511	7.5	16		7.45	60.38	I	3.383
1899	29515	7.0	16	6	20'			3.22
1900	29545	7.5	16	6	46.28	71.51	5	3.014
1901	29582	6.8	16	7	19.26	77.76	3	2.657
1902	29646	7.5	16	8	27.90	73.45	2	2.041
1903	29678	7.3	16	9	34'90	78.44	I	2.054
1904	29649	7.2	16	9	52.26	67.81	5	3.099
1905	29656	7.0	16	10	10.44	75.65	5	3.180
1906	29664	7.5	16	10	20.82	73.47	ı	3.148
1907	29672	8.0	16	10	21'42	78.19	4	2.899
1908	29693	7.0	16	10	56.96	77.45	1	2.557
1909	29680	8.0	16	II	11.08	74'44	2	3'149
1910	29689	7.0	16	11	56.97	74.00	5	3.385
1911	29706	7.0	16	I 2	27.77	70.04	5	3.510
1912	29752	7.2	16	I 2	53.73	77.98	2	2.324
1913	29764	7.8	16	13	25.99	76.69	4	2.242
1914	29777	6.5	16	14	38.90	72.41	4	2.602
1915	29776	7.7	16	15	11.10	65.46	I	3.064
1916	29812	7.0	16	15	48.93	79.19	4	2.574
1917	29820	7.7	16	15	55.21	76.64	5	2.222
1918	29800	6.7	16	16	9.70	71.04	5	3.110
1919	29837	7.5	16	16	28.94	76.01	3	2.283
1920	29881	5.3	16	17	46.68	70.87	2	2.228
1921	29880	7.2	16	18	27.87	75.65	5	2.847
1922	29897	8.2	16	18	32.24	71.47	I	2.258
1923	29889	7.5	16	19	9.43	80.31	1	3.110
1924	29910	7.7		19	24.41	79.70	4	2.262
1925	29915	7.2		20	4'33	72.84	5	3.013
1926	29924	7.7	16	20	12.33	76.06	5	2.884
1927	29930	7.0		20	32.20	75.49	4	3.016
1928	29934	7.5	-	2 I	7.94	60.38	i	3.419
1929	29962	7.7		21	9.74	77.45	1	2.713
1930	29951	7.0	_	21	28.27	73.88	2	3.322
1931	29993	7:3	16	22	23.64	75.45	3	2.732
1932	30001		16	22	42.48	80.42	I	2.729
1933	30041	7.5 6.8	16	23	33.21	74.96	4	2.386
1934	30038	8·o		23	39.67	78.95	2	2.250
1935	30044	7.6	_	24	19.73	75.46	3	+ 2.975

No.	Mean N.I	P.D.	1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1891	93° 88	8' 50	10"·1 54·2	71·10 68·42	5 5	+ 9"·78	See Notes. [3981. W 24, Si, L, 4998, Gl
1893	88	4	4.5	78.82	5	9'73	W 40, Si, L, 5001, Gl
1894	54	7	10.4	75.13	3	9.71	W 78. [3985.]
1895	87	3	4.2	70.44	3	9.40	W 48, L, 1963, Gl 3987.
1896		16	32 <b>.</b> 9	74·78 76·78	3	9.59	W 130, R 5327. [L <sub>5</sub> 1966.
1897 1898	ł	46 47	35.1	65.47	3	9°57 9°56	W 72, Oe 15393, Si <sub>4</sub> 1481,
1899	111	4	42.0	63.06	3	9.22	T 7533, Ar 3368, 7 yr
1900	1	11	49.0	71.51	5	9.21	Sp 5733. [1300, 9 yr 1459.
1901		34	37.6	77.76	3	9'47	W
1902		53	56.8	73°45 78°44	2 I	9.38	W 248. W 277. [5049.
1903		19 20	52.5	69.66	4	9.27	W 156, Si, Si, 788, L
1904		11	4.2	75.65	5	9.25	W 164, Si, L, 2152.
					_	, ,	W 166, T 7565, Ar 3384,
1906	1 2	38	31.1	73.47 78.19	I	9°23	L <sub>3</sub> 1999. [L <sub>3</sub> 2154, B346.
1907		39 33	5'4 54'2	77.45	4	6.10	See Notes. [2158, Gl 4407.
1909		43	30.2	74.44	2	9.17	W 186, Ar 3387, Sp 5752, La
1910		33	58.6	74.00	5	9.14	W199,Si, 1488,L, 1977.
1911	96	34	3.6	70.04	5	9.07	W 213, Si <sub>2</sub> , L <sub>3</sub> 2163.
1912		53	57.2	77.98	2	9.04	W 367, see <i>Notes</i> . W 381. [Gl 4021.
1913	1 22	12	32.0	76·69 69·90	4 5	8.90 8.99	W 381. [Gl 4021.] W 404, T <sub>2</sub> , N 7 yr 1852, Y 6761,
1914	_	33 37	23.0	65.46	5 I	8.86	R 5390, L, 5091.
1916	67	27	42'2	79'19	4	8.81	
1917	66	42	42.2	76.64	5	8.80	R 5399. [5100, Gl 4029.
1918		47	2.4	70.02	6	8.78	W 284, Si <sub>2</sub> , Si <sub>5</sub> 795, L <sub>1</sub>
1919	67 56	53	30.4	75'72 70'87	4 2	8·75 8·65	W 461. [7 yr 1323, Y 6791. W 510, T 7627, Ar 3408, 12 yr 1353,
1921	79	27	18.0	75.65	5	8.60	W 332, L, 639, Gl 4038.
1922	56	ó	54.1	64.95	2	8.59	W 536, Ar 3410.
1923		11	51.3	80.31	1	8.54	Si, 797, Sp 5794.
1924		19	44.0	79.70	4	8 52	W 550. [4042.] W 358, R 5414, Si,, Gl
1925		I 2	27.2	72.84	5	8.47	00 . 0
1926	81	11	56.5	76.06	5	8.46	W 362, L, 2064, Gl 4044.
1927		22	2'4	75.49	4	8.43	W 367, T <sub>2</sub> , L <sub>1</sub> 5138, Gl Oe 15656, L <sub>6</sub> . [4047.]
1928		55	49.3	65.46	5 1	8·39 8·38	W 601.
1929	73	3 <sup>2</sup>	39.9	77.45 73.88	2	8.36	W 381.
1931	74	22	11.7	75.45	3	8.29	W 641, T, Gl 4057.
1932	74	17	24.2	80.42	I	8.27	W 648, T2, Gl 4058.
1933	66	38	50.3	73.24	5	8.18	W 689.
1934	85	49 30	40.5	78.95	3	+8.13	See Notes.
1935	3	3-		13.40	3		

1937 3 1938 3 1939 3 1940 3 1941 3 1942 3 1944 3 1944 3 1945 3	30087 30073 30073 30092 30076 30129 31040 30136 30187 30190 30220 30174 30232 30243	7'9 7'7 6'5 7'5 7'0 8'1 7'0 5'7 7'0 7'7 8'0 6'8	16 <sup>h</sup> 16 16 16 16 16 16 16 16	25 <sup>m</sup> 25 25 26 26 27 27 28 28 28	10 <sup>8</sup> ·26 29·04 52·61 13·39 27·81 28·90 38·39 1·36 20·08	78·46 75·27 73·88 71·91 76·18 76·19 74·06 75·47 78·47	2 5 5 4 4 4 5 4	+ 2**200 2*888 2*565 3*345 2*197 2*539 2*841 1*804
1938 3 1939 3 1940 3 1941 3 1942 3 1943 3 1944 3 1945 3	30092 30076 30129 31040 30136 30187 30190 30220 30174 30232	6.5 7.5 7.0 8.1 7.0 5.7 7.0 7.7	16 16 16 16 16 16 16	25 26 26 27 27 28 28	52.61 13.39 27.81 28.90 38.39 1.36 20.08	73.88 71.91 76.18 76.19 74.06 75.47	5 4 4 4 5 4	2·565 3·345 2·197 2·539 2·841 1·804
1939 3 1940 3 1941 3 1942 3 1943 3 1944 3 1945 3 1946 3 1947 3	30076 30129 31040 30136 30187 30190 30220 30174 30232	7.5 7.0 8.1 7.0 5.7 7.0 7.7 8.0 7.0	16 16 16 16 16 16	26 26 27 27 28 28	13.39 27.81 28.90 38.39 1.36 20.08	71.91 76.18 76.19 74.06 75.47	4 4 5 4	3·345 2·197 2·539 2·841 1·804
1940 3 1941 3 1942 3 1943 3 1944 3 1945 3 1946 3 1947 3	30129 31040 30136 30137 30190 30220 30174 30232 30243	7.0 8.1 7.0 5.7 7.0 7.7 8.0 7.0	16 16 16 16 16	26 27 27 28 28	27.81 28.90 38.39 1.36 20.08	76·18 76·19 74·06 75·47	4 5 4	2°197 2°539 2°841 1°804
1941 3 1942 3 1943 3 1944 3 1945 3 1946 3 1947 3	30136 30136 30187 30190 30220 30174 30232 30243	8·1 7·0 5·7 7·0 7·7 8·0 7°0	16 16 16 16	27 27 28 28	28.30 1.36 28.30	76·19 74·06 75·47	4 5 4	2.539 2.841 1.804
1942 3 1943 3 1944 3 1945 3 1946 3 1947 3	30136 30187 30190 30220 30174 30232 30243	7.0 5.7 7.0 7.7 8.0	16 16 16	27 28 28	38.39	74°06 75°47	5 4	2·841 1·804
1943 3 1944 3 1945 3 1946 3 1947 3	30187 30190 30220 30174 30232 30243	5.7 7.0 7.7 8.0	16 16 16	28 28	1.36	75'47	4	1.804
1944 3 1945 3 1946 3 1947 3	30190 30220 30174 30232 30243	7°0 7°7 8°0 7°0	16 16	28	20.08			
1945 3 1946 3 1947 3	30220 30174 30232 30243	7.7 8.0 7.0	16 16			78.47		
1946 3 1947 3	30174 30232 30243	8.0	16	28				2.022
1947 3	30232	7.0			54'54	76.44	2	2.478
	30243			29	44.07	72.48	4	3.368
1948 3			16	31	19.81	67.82	5	3.508
	30271		16	31	24'44	78.30	4	5.952
		7.5	16	31	35.47	76.06	5	2.321
1950 3	30278	6.7	16	31	43.24	77.44	3	2.534
1951 3	30256	7.0	16	32	0.33	72.71	4	3*252
	0280	7.6	16	32	15.84	72.98	4	2.625
	0337	6.2	16	32	44.76	72.49	I	2.431
	30274	7.0	16	32	49'11	76.95	4	3.572
	30359	6.8	16	34	38.26	77.45	2	2.669
1956 3	30346	6.5	16	34	44'74	68.63	5	3.088
1957 3	30345	8.2	16	34	47'01	74.67	4	3.120
	30369	8.0	16	35	40.80	67.41	2	3.313
	0407	6.0	16	35	50.00	69.45	I	2.487
	0398	6.2	16	37	11.			3.745
1961 3	30436	7.5 8.1	16	38	11.82	72.78	3	3.201
1962 3	30464	8.1	16	38	25.31	74.66	5	3.019
1963 3	30473	8*2	16	38	47'35	77.21	4	3.089
1964 3	30496	7.0	16	38	55'37	70.92	6	2.250
1965 3	30483	7.0	16	39	8.			3.044
1966 3	30513	6·1	16	39	43.03	78.21	4	2'712
1967 3	30501	7.0	16	39	45.59	74.06	5	2.978
1968 3	30535	6.6	16	40	51.21	70.06	5	3.022
1969 3	30542	8.4	16	4 T	6.			3.051
1970 3	30580	7'3	16	42	13.44	77.21	4	2.819
1971 3	30568	7.0	16	42	15.12	73.86	5	3.166
1972 3	30594	7.7	16	42	22.02	76.96	2	2.602
1973 3	30590	5.9	16	42	23,51	71.68	5	2.762
1974 3	30583	2.0	16	42	55.			3.308
1975 3	30640	7.2	16	43	15.98	77.45	2	2.093
	30622	6.0	16	43	51.13	72.84	5	3.126
	30649	6.8	16	44	17.40	72.20	5	2.719
	30665	7.0	16	45	9.98	78.47	1	2.857
	30679	7.5	16	45	33.52	76.07	5	2.409
1980 3	30670	7.0	16	45	35.86	68.71	4	+ 3.130

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
1936 1937 1938 1939 1940	54° 31′ 28″ 3 81 26 15.6 67 32 5.7 102 31 51.2 54 30 16.8	78·46 75·27 73·88 68·10 72·16	2 5 5 6 7	+8"·06 8·04 8·01 7·98 7·96	W 730. PM 1831, L, 2090. R 5435, T. W 781.
1941 1942 1943 1944 1945	66 34 24.8 79 21 55.9 44 8 9.9 49 37 16.7 64 15 37.2	76·19 74·06 75·47 78·47 76·44	4 5 4 1 2	7.88 7.87 7.83 7.81 7.76	W 803. [655, Gl 4080. W 510, T, Sp 5854, L, PM 1838, Oc 16289. W 842, RC 3573. W 853.
1946 1947 1948 1949	103 27 46.2 96 17 4.2 84 28 5.5 58 47 13.6 55 55 22.6	70 <sup>2</sup> 3 67 <sup>7</sup> 3 78 <sup>2</sup> 0 76 <sup>0</sup> 6 77 <sup>4</sup> 4	6 7 4 5 3	7.70 7.57 7.56 7.55 7.53	W 535. W 570, Si, L, 2233. W 577, Si, Sp 5876, L W 947. [2127, Gl 4100. W 959.
1951 1952 1953 1954 1955	98 22 2.6 70 11 29.4 62 42 14.7 99 18 3.1 72 2 49.2	70.42 71.62 72.49 74.65 77.45	5 5 1 5 2	7.51 7.49 7.44 7.44 7.30	2238. W 587, Si <sub>3</sub> , Sp 5883, L <sub>3</sub> W 973, R 5476. W 991, T 7717. W 604, Si <sub>3</sub> , L <sub>5</sub> 2010. W 1052.
1956 1957- 1958 1959 1960	90 45 22.5 93 58 21.4 100 55 57.9 64 53 55.1 118 16 27.7	68·63 74·67 69·95 69·45 65·93	5 5 2 1 4	7°29 7°21 7°21 7°09	L, 5257. W649, Sp 5905, L <sub>3</sub> 2246. W 668, Si <sub>3</sub> 1858. W 1091, T <sub>2</sub> , Y 6899. T 7745, Ar 3451, Oe 15905, Y
1961 1962 1963 1964 1965	108 54 14.8 87 25 55.6 90 45 45.1 66 14 58.1 88 44 54.0	72.78 69.67 77.21 71.68 61.95	3 6 4 5 4	7.01 6.99 6.95 6.95	F6008, 9 yr 1522, St 9081   Oe 15918.   W 718. PM 1860, Sp   L <sub>1</sub> 5299. [5936,Gl4128.   W 1201, PM 1865.   See Notes.
1966 1967 1968 1969	74 I 21.0 85 43 40.6 87 42 28.2 87 36 44.4 78 38 44.3	78·21 74·06 70·06 63·70 77·21	4 5 5 4 4	6.89 6.88 6.79 6.77 6.67	W 1217. W 745, Si,, L, 2193, Gl See Notes. [4134. Ar 3463, L, 5320. W 791, R 5551, T, 7 yr [1361, Sp5967, Gl 4141.
1971 1972 1973 1974 1975	94 17 26.0 69 34 17.8 76 11 9.7 100 33 34.8 52 12 59.9	73.95 76.96 71.68 62.58 77.45	4 2 5 7 2	6.67 6.66 6.65 6.62 6.59	Sp 5966, L <sub>8</sub> 2275. W 1302. [1404, Gl <sub>4</sub> 142. W 794, lk 5552, 12 yr See Notes. W 1341, Y 6954.
1976 1977 1978 1979 1980	92 26 7·2 74 24 16·0 80 22 37·6 73 59 28·8 92 35 10·1	72.84 70.80 78.47 76.07 68.86	5 5 5 5	6.24 6.20 6.43 6.40 +6.40	R 5554, L <sub>1</sub> 5349. W 1351. PM 1878, R 5564. W 1387, R 5566. [5366. W 855, St <sub>2</sub> St <sub>3</sub> 851, Sp 5976, L <sub>1</sub>

No.	Lalande.	Mag.	Mean	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
1981	30671 30666	8·o 6·5	16h	45 <sup>m</sup>	52".52	73'27	5	+3*·182 3.239
1983	30696	7.0	16	46	28.04	77.44	1	2.815
1984	30694	7.0	16	46	41.01	71.68	5	3.066
1985	30734	6.8	16	46	53'43	75'22	4	2.372
1903	30134			40	33 43	,3	7	- 312
1986	30728	6.2	16	47	42'16	75.95	2	3.103
1987	30769	8.0	16	48	24.01	74.67	5	2.24
1988	30750	6.2	16	48	48.		"	3.451
1989	30756	6.2	16	49	15.			3.612
1990	30800	6.0	16	49	31,91	68.46	5	2.249
	20024	7.0	16	40	47:07	22.45		1.841
1991	30834 30812	7°3 8°2	16	49 49	47.21 51.05	77 <sup>.</sup> 45 74 <sup>.</sup> 67	I	
1992	30816	7.0	16	51	4.66		5 1	2.493
1993		6.2	16	51	48.64	65.49 71.45	4	3.395
1994	30864	7.0	16		27	/1 45	4	2.752
1995	30854	/ 0	10	52	21			3.489
1996	30894	6.8	16	52	58.68	78.45	2	2.413
1997	30909	8.6	16	53	4.			2.460
1998	30962	6.8	16	53	25.23	73'25	4	1.360
1999	30911	6.8	16	53	28.46	77.47	3	2.746
2000	30923	7.7	16	54	4.33	70.47	5	2.846
2001	30930	7.0	16	54	23.71	71.50	4	2,010
2002	30951	7.7	16	54	28.67	78.48	2	2.490
2003	30948	7.5	16	55	27.95	71'14	3	3.316
2004	30986	8.0	16	55	38.12	77.45	2	2.428
2005	30990	5.8	16	55	41.46	74.73	4	2.232
2006	31008	7.2	16	56	36.90	70.65	6	2.845
2007	31038	7.4	16	57	15.63	76.97	2	2.281
2007	31022	6.8	16	57	17.53	71.55	4	3.072
2009	31087	7.5	16	58	32.37	70.65	5	2.179
2010	31099	7.0	16	58	52.76	75.10	5	2.184
			-6	<b>#</b> 0				0
2011	31079	6.2	16	59	21.43	74.95	2	2.083
2012	31118	1	16	59	22.28	74.82	3	2.170
2013	31068	6.3	17	59	25°54 24°24	74.44	3	3.388
2014	31111	6.2	17	0	59.	74'15	3	3.100
2015	3.111	3	1 1		39			3.477
2016	31158	6.0	17	1	0.64	77.45	I	2.243
2017	31143	7.0	17	I	48.09	71.47	2	3.461
2018	31173	7.0	17	2	10.44	68.96	6	2.968
2019	31171	6.2	17	2	20.02	67.68	5	3.126
2020	31213	8.0	17	2	31.60	73.58	5	2.375
2021	31188	6.0	17	2	53.47	80.47	I	3.309
2022	31229	7.3	17	3	21.23	76.87	5	2-722
2023	31210	7.0	17	3	43.16	73.09	3	3.360
2024	31231	7.0	17	3	53.07	65.96	2	3.057
2025	31270	7.0	17	4	57.64	74.30	5	+2.781
		}						

No.	Mean N.	P.D.	1875.0.	Epoch.	Obs.	Ann. Prec.	. Authorities.
1981	O.4°	r6'	18"'1	73.27	-	+6":37	See Notes.   Y 697
					5 6	6.56	T7816,Ar3472,Oe1606
1982	110	12	15.8	60.77			W 9 - D 9 - 6 (
1983	78	32	44.2	77.44	I	6.32	W 872, Bn, Sp 6002, C
1984	89	45	21.1	71.68	5	6.30	See Notes. [416c
1985	61	7	25.2	75.22	4	6.59	PM 1880. [6012, L, 5378
1986	91	24	I 2·2	75.95	2	6.55	W 891, Si, Si, 854, S
1987	68	37	18.1	74.67	5	6.16	W1471,PM1881,R558
1988	106	36	17.4	60.46	4	6.13	See Notes.
1989	112	57	i.8	62.41	2	6.00	T 7846, Ar 3483, Oe 16125,
1990	68	50	20.6	69.44	5	6.07	W 1513. [7yr1910, Y 701
1991	46	0	22.5	77'45	1	6.05	W 1537.
1992			33 <b>.5</b> 7.6	74.67	Į.	6.04	W 1521.
	65	34			5		W 939, Si, 1517, L, 203
1993	104	10	36.1	65.46		5.94	W 664 Sp 65-8 Cl 45
1994	7.5	55	21.5	71.45	4	5.88	W 964, Sp 6038, Gl 417
1995	108	3	5.5	62.94	2	5.83	T 7868, Ar 3492, (
1996	74	21	28.9	78.45	2	5.78	W 1606, T.
1997	64	27	57.8	58.95	2	5.77	W 1613, Ar 3496.
1998	37	6	22.8	73.5	4	5.74	3490
1999	75	43	40.3	77.47		5.74	W 992, R 5618, Gl 418
2000	80	43		69.63	3	5.68	W 1002, L, 706, Gl418
2000	00	0	45.2	0903		5 00	W 1002, 11, 700, 01410
2001	83	13	37.1	71.50	4	5.67	See Notes.
2002	65	36	15.9	78.48	2	5.66	W 1650.
2003	100	46	10.0	73.97	2	5.22	W1027, Si31889, L, 204
2004	63	19	45.7	77.45	2	5.26	W 1690.
2005	67	10	56.4	74.73	4	5.22	W 1688, R 5639.
2006	79	59	49.8	70.65	6	5.38	Sp 6069, L, 714.
2007	69	5	39.0	76.97	2	5.42	
2008	89	58	8.0	71.22	4	5.42	W1062, L, 5454, Gl419
2009	55	16	53.8	70.65	5	2.31	W 1781.
2010	55	26	23.3	75.10	5	5.58	W 1789.
2011	86					F:05	W 1103, R 5665, L, 234
	1	3	34'1	71.78	3	5.5	W 1806.   Gl 4200
2012	55	2	4.5	74.82	3	5.54	W 1806. [Gl 4206
2013	103	45	44'9	74.44	1	5.54	See Notes. [878, L, 5482
2014	91	29	9.3	74.12	3	2.19	W 1125,PM 1898, Si, S
2015	107	26	26.8	60.18	7	2.11	T 7931, Ar 3519, 1
2016	67	44	41.7	77.45	τ	2.10	W 1844, R 5681.
2017	106	44	16.5	76.47	1	5.04	Oe 16376. [2366, Gl 422
2018	85	24	12.8	69.66	5	2.01	W 1160, Si., R 5690, I
2019	93	42	47.0	67.68	5	4'99	W 1161, Si, L, 2333.
2020	61	42	50.3	73.58	5	4.98	W 20.
2021	100	2 I	29.9	80.47	I	4.95	See Notes.
2022	1	52	33.4	76.87	5	4.01	W 35.
2023	102	32	27.7	73.09	3	4.88	W 13, Si, 1901, L, 206
2024	89	21	37.0	65.46	1	4.86	W 26, L, 5510, Gl 4228
	77	22	32.3	74.30	5	+4.77	W 49, Gl 4232.
2025							

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
2026 2027 2028 2029 2030	31292 31301 31313 31316 31349	7'2 7'7 5'2 7'0 7'8	17 <sup>h</sup> 5 <sup>m</sup> 0*·07 17 5 20·38 17 5 30·15 17 6 6·55 17 8 0·49	73.66 76.50 70.46 77.13 70.47	5 2 5 3 5	+2°·212 2·041 1·946 2·249 2·460
2031 2032 2033 2034 2035	31357 31406 31392 31428 31455	6.5 7.7 var. 7.5 7.0	17 8 19.51 17 10 2.94 17 10 11.18 17 11 0.58 17 11 7.31	75'47 73'70 70'81 76'68 70'08	2 5 3 5 5	2.557 2.649 3.039 2.644 2.162
2036 2037 2038 2039 2040	31434 31483 31482 31523 31494	7.2 6.5 6.0 7.2 7.0	17 11 24'51 17 12 21'79 17 12 32'05 17 13 25'47 17 13 28'28	72.70 77.47 74.30 75.28 71.32	5 5 5 5	2.764 2.511 2.661 2.435 3.020
2041 2042 2043 2044 2045	31538 31561 31547 31546 31588	7'3 7'8 7'4 7'2 6'8	17 14 7.53 17 14 10.55 17 14 23.65 17 14 4858 17 15 54.23	76·51 76·48 72·51 68·05 67·27	1 5 5 5	2·608 2·221 2·696 3·037 2·954
2046 2047 2048 2049 2050	31601 31636 31693 31672 31611	6·5 7·0 6·5 8·0 7·0	17 15 59.06 17 16 41.30 17 17 11.07 17 17 13.51 17 17 18.03	76·89 76·48 71·89 72·55 72·51	5 5 5 2 4	2.675 2.561 1.597 2.120 3.507
2051 2052 2053 2054 2055	31664 31678 31669 31707 31760	7.5 7.5 7.5 8.2 7.0	17 17 59°21 17 18 20°59 17 18 36°84 17 19 9°41 17 20 0°97	66·29 76·51 71·51 76·48 75·08	5 3 4 3 5	2.870 2.919 3.272 2.921 2.224
2056 2057 2058 2059 2060	31741 31754 31864 31780 31795	6·5 6·2 7·5 6·5 7·6	17 20 16·96 17 20 20·76 17 20 22·64 17 21 0·52 17 21 45·96	72.23 70.31 78.23	5 5 5 3 5	2·893 2·669 0·148 2·401 2·644
2061 2062 2063 2064 2065	30801 31799 31804 31816 31860	7.0 8.6 5.5 7.5 8.5	17 21 57.65 17 22 2.01 17 22 27 17 23 6.40 17 23 36.87	76·54 70·68	5 1 6 2	2.680 2.804 3.062 3.206 2.796
2066 2067 2068 2069 2070	31849 31930 31921 31900 31948	7.5 7.2 7.7 6.8 6.5	17 23 43'33 17 25 0'03 17 25 1'77 17 25 33'70 17 25 53'49	75.87 75.69 71.29	6 5 5 5 3	3°170 2°146 2°535 3°069 +2°601

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2026 2027	56° 28′ 41″·1 51 32 59'4	73.66 76.20	5 2	+4":77 4:74	W 107, Y 7125.
2028	49 3 55.7	69.04	7	4.72	W 114.
2029	57 39 45.7	77'13	3	4.67	W
2030	64 51 52.8	70.47	5	4.21	W 175.
2031	68 25 17.1	75.47	2	4.48	W 189.
2032	72 I 35°2	73'70	5	4'34	W 240. [5542, Gl 4248.
2033	88 38 54.3	70.81	3	4.35	W 143, Si, Sp 6162, L
2034	71 50 24.3	76.68	5	4.56	W 258.
2035	55 9 4.1	70.08	5	4.54	W 278.
2036	76 43 32.1	72.70	5	4.55	
2037	66 46 23.2	77.47	ı	4'14	
2038	72 32 48.7	74'30	5	4.15	W 308, R 5760.
2039.	64 3 40.7	75.28	5	4.02	W 341.
2040	87 43 48.6	71.32	5	4.04	W 209, R 5765, Si, Sp
					6185, L, 5564, Gl 4262.
2041	70 30 22.8	76.21	I	3.99	W 363.
2042	57 0 2.0	76.48	1	3.08	W 372.
2043	73 59 10.8	72.21	5	3.96	W 365.
2044	88 26 23.2	68.72	4	3.93	W 237, L, 5574, Gl 4273.
2045	84 52 21.4	67.73	4	3.83	R 5784, Sp6199, L, 2448.
2046	73 8 37 <sup>.</sup> 7 68 43 25 <sup>.</sup> 1	76.89	5	3.83	W 420, R 5793.
2047	68 43 25.1	<b>76·4</b> 8	5 6	3.77	
2048	41 41 12.1	70.02		3.45	
2049	54 3 <sup>2</sup> 3 <sup>3</sup>	72.25	2	3.43	W 479.
2050	108 19 39.5	72.21	4	3.41	Oe 16730.
2051	81 16 33.8	67.30	5	3.66	W 297, Gl 4288.
2052	83 21 50.0	76.21	3	3.62	L 2470.
2053	98 42 49.2	71.21	4	3.60	W 303, L <sub>3</sub> 2375.
2054	83 27 23.0	76.48	3	3.22	L <sub>3</sub> 2477.
2055	57 12 58.2	75.08	5	3.48	W 555.
2056	82 17 35.3	70.00	5	3.46	T, Sp 6232, L, 2487, Y
2057	72 58 19.0	72.2	5	3.45	W 551, Y 7251. [7247
2058	24 14 26.4	69.30	5	3.45	Oe 17100.
2059	63 0 41.4	78.23	3	3.40	W 589.
2060	71 59 41.1	70.08	5	3.33	W 601.
2061	73 26 15.4	75.20	5	3.31	W 612.
2062	78 30 13.6	76.24	1	3.30	W 372, PM 1944, R 5853,
2063	89 33 58.0	65.96	4	3.27	See Notes. [L,785, Gl4305
2064	95 48 57.0	73 03	4	3.51	W 387, Si, L, 2386, Y
2065	78 11 40.7	74.20	2	3.14	W 412, Gl 4315. [7270.
2066	94 16 10.4	72:30	5	3.16	W 406, R 5864, Si, Sp
2067	54 57 42.6	75.87	5	3.02	W 722. [6258, L, 2389.
2068	67 52 3.3	75.69	5	3.02	
2069	89 51 44.5	71.29	5	3.00	W 446, T 8111, Si, L
2070	70 22 51.3	69.48	3	+2.97	W 737. [5665, Gl 4321
			1		

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2071	31978	7.0	17h 27m	36"10	69.88	5	+3".141
2072	32006	8.0	17 28	24.27	70.39	I	3.102
2073	32042	6.8	17 28	52.45	78.47	2	2.678
2074	32075	7.7	17 29	18.13	75.20	4	2.157
2075	32138	6.7	17 30	40.93	70.27	5	1.920
2076	32120	7.0	17 30	47.94	68.28	5	3'137
2077	32133	6.3	17 31	15.05	77.44	I	2.359
2078	32081	6.5	17 31	14.52	70.22	I	3.604
2079	32165	6.2	17 31	24.46	72.21	5	2.059
2080	32147	7.5	17 31	41.70	74.2	5	2.281
2081	32192	7.8	17 32	46.16	76.40	5	2.263
2082	32255	6.0	17 33	21.24	70.86	5 6	1.263
2083	32203	7.0	17 33	41.63	68.02		3.150
2084	32262	7.0	17 33	54.40	76.86	3	1.914
2085	32256	7.0	17 34	12,13	69.20	5	2.512
2086	32286	8.1	17 34	25.22	76.53	ı	1'924
2087	32267	7.5	17 34	28.85	72.91	5	2.295
2088	32260	8.1	17 34	32.	, ,		2.467
2089	32294	6.0	17 35	32.50	72.01	6	2.710
2090	32280	7.0	.17 35	56.79	68.79	7	3.183
2001	32333	7.5	17 36	29.05	71.27	5	2.546
2092	32330	8.2	17 36	33.81	71.23	2	2.663
2093	32376	7.8	17 37	25.29	74.2	5	2.427
2094	32350	7.7	17 37	31.42	69.27	5	3.113
2095	32394	6.2	17 37	46.68	79.00	4	2.320
2096	32415	7.8	17 38	11.83	76.49	5	2.313
2097	32456	6.0	17 38	29.92	71.20	5	1.376
2098	32408	6.0	17 38	35.86	66.21	6	2.729
2099	32434	7.2	17 39	35.83	70.03	2	2.814
2100	32422	8.0	17 39	44'47	72.23	5	3.257
2101	32442	7.2	17 39	59.46	76.24	r	2.942
. 2102	32424	7.0	17 40	12.64	63.03	2	3.622
2103	32505	6.2	17 40	58.05	67.36	7	2.254
2104	32518	7.0	17 41	37'34	78.98	4	2.428
2105	32509	8.0	17 42	6.35	72.02	4	3,155
2106	32568	6.2	17 42	30.56	66.75	4	2.096
2107	32572	8.3	17 42	53.42	77.84	3	2.339
2108	32624	8.0	17 43	28.67	75.01	2	1.811
2109	32601	7.0	17 44	14'42	72'11	5	2.840
2110	32626	7'3	17 44	36.39	78.24	4	2.262
2111	32619	7.8	17 44	41.35	74.92	5	2.847
2112	32584	8.0	17 44	44.91	70.23	Y	3.628
2113	32628	6.4	17 44	54.90	64.27	5	2.789
2114	32633	6.5	17 45	31.64	69.89	5	3,100
2115	32688	6.0	17 45	35.15	79'17	3	+5.355

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2071 2072 2073 2074 2075	92° 57′ 59″ 0 91 31 10·6 73 24 35′2 55 22 19·5 49 0 32′7	72.82 70.39 78.47 75.50 69.48	3 1 2 4 6	+2".83 2.76 2.72 2.68 2.56	W 489, Si <sub>3</sub> , Si <sub>4</sub> 918, Sp W505, Si <sub>2</sub> , Si <sub>5</sub> 921. [6283. W 851, R. W 880. R 5923.
2076 2077 2078 2079 2080	92 47 54.6 61 44 9.6 111 50 8.1 52 37 6.5 69 39 52.1	68·99 77·51 70·55 72·51 74·29	4 2 1 5 4	2.55 2.53 2.51 2.50 2.47	W 561, Si <sub>8</sub> 925. W 942. T 8141, Ar 3598, Oe W 961. [17017. W 958.
2081 2082 2083 2084 2085	69 0 12.2 41 20 26.8 92 4 55.3 48 54 58.3 57 11 20.5	76·70 70·86 70·90 76·86 69·50	5 5 3 5	2·38 2·33 2·30 2·28 2·25	See Notes. Sp 6331, L <sub>1</sub> 5730. Bn. W 1072, R 5948.
2086 2087 2088 2089 2090	49 9 28.2 59 40 29.5 65 30 54.9 74 45 21.8 94 47 11.3	76.53 72.91 66.16 75.32 70.16	5 3 5 6	2.53 2.53 5.53 5.53	W 1091. W 1082. [1672. W 1076, Ar 3606, RC <sub>2</sub> W 1110, R 5958, Y 7369. W 677, R, Si <sub>2</sub> , L <sub>3</sub> 2437, [Gl 4361.
2091 2092 2093 2094 2095	68 25 51°1 72 54 15°0 64 8 19°7 91 44 52°6 60 31 15°4	71'27 76'54 74'52 68'64 79'00	5 5 6 4	2.05 2.05 1.97 1.96 1.94	W 1159, R 5968. W 1158. W 1205. W711, Si <sub>5</sub> 937, L <sub>1</sub> 5760. W 1217, R 5986.
2096 2097 2098 2099 2100	60 17 16.7 38 7 14.9 75 32 2.4 78 48 9.9 97 55 45.2	76'49 71'50 69'51 73'19 72'53	5 5 4 3 5	1.90 1.88 1.87 1.78	W 1230. W 744, R 5992. [4380. W757, R 6004, L, 827, Gl W 755, Sp 6372, L, 2453,
2101 2102 2103 2104 2105	84 25 5.0 112 25 43.5 58 26 40.6 64 12 3.3 92 9 6.3	76·54 65·46 72·49 78·98	1 2 4 4 5	1.75 1.66 1.61 1.56	[Y 7405.] W 770, L, 2680. Oe 17215. W 1304. W 1323, R 6026. W 812, Si, 947, Sp 6394,
2106 2107 2108 2109 2110	53 51 53.9 61 11 50.7 46 36 46.0 80 6 40.7 69 5 25.3	67·70 77·84 72·77 72·11 78·24	4 3 3 5 4	1.53 1.50 1.44 1.38	[L 5808. See Notes. W 1396. W 863, Si, T, L <sub>e</sub> , Gl [4401.
2111 2112 2113 2114 2115	80 25 11'9 112 38 5'7 78 0 54'0 91 12 9'6 60 38 34'6	74'92 68'51 66'45 69'89 79'17	5 2 4 5 3	1'34 1'34 1'32 1'27 +1'26	W 870, Gl 4402. Oe 17292. W 877, Gl 4403. Sp 6421, L <sub>1</sub> 5833. W 1438.

No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
2116 2117 2118 2119 2120	32644 32649 32693 32682 32795	7.5 6.8 6.5 7.5 8.5	17 <sup>h</sup> 45 <sup>m</sup> 39 <sup>s</sup> ·85 17 45 44·43 17 46 20·09 17 46 33·98 17 47 31·	69.00 66.52 71.48 72.24	2 3 5 5	+ 3°·046 3°046 2°706 3°210 1°567
2121	3 <sup>2</sup> 779	7.2	17 47 31'48	72'13	5	1.740
2122	3 <sup>2</sup> 750	7.7	17 47 33'47	77'45	2	2.385
2123	3 <sup>2</sup> 7 <sup>2</sup> 3	7.0	17 47 55'59	74'00	4	3.152
2124	3 <sup>2</sup> 76 <sup>2</sup>	6.5	17 48 23'39	65'32	6	2.808
2125	3 <sup>2</sup> 799	8.2	17 48 58'62	74'79	6	2.681
2126 2127 2128 2129 2130	32792 32838 32849 32876 32880	7'I 8'I 8'2 8'0 7'3	17 49 19.22 17 49 44.56 17 50 18.79 17 50 50.57 17 51 1.08	69:45 76:53 71:77 80:48 74:53	5 1 4 1	3°023 2°542 2°746 2°546 2°588
2131	32889	7·8	17 51 22.33	76.53	2	2.739
2132	32935	3·5	17 51 57.86	72.52	4	2.056
2133	32921	6·5	17 52 4.58	69.89	5	2.477
2134	32913	8·5	17 52 7.31	80.55	1	2.739
2135	32965	6·3	17 52 50.11	76.98	4	2.191
2136	32959	7·8	17 53 28.43	81.53	1	2·741
2137	32962	7·1	17 53 53.27	68.49	2	3·057
2138	32980	7·0	17 54 25.41	71.51	2	3·132
2139	33041	6·5	17 55 18.58	67.90	5	2·711
2140	33107	6·5	17 55 49.85	75.12	5	1·815
2141 2142 2143 2144 2145	33060 33115 33131 33112	6·o 7·o 6·o 7·5	17 56 16· 17 56 36·77 17 56 39·38 17 57 1·14 17 57 9·37	77'45 77'30 71'79 71'08	1 5 5 5	3.264 3.197 2.280 2.194 2.668
2146 2147 2148 2149 2150	33138 33168 33158 33134 33185	7.5 8.0 8.0 7.0	17 57 52.70 17 58 9.33 17 58 30.02 17 58 34.36 17 58 53.51	70°18 68°46 76°53 81°53 68°50	6 3 1 1 6	2.736 2.289 2.720 3.333 2.401
2151	33193	6·7	17 59 7.67	70.47	3	2·288
2152	33198	7·1	17 59 30.29	77.77	4	2·479
2153	33183	6·5	17 59 42.01	70.31	5	3·083
2154	33229	8·0	18 0 43.59	79.18	3	2·922
2155	33241	7·8	18 0 52.29	71.94	5	2·863
2156	32264	7.5	18 2 1.00	70°55	2	3°350
2157	33320	9.0	18 2 22.28	76°51	1	2°478
2158	33347	7.5	18 2 43.50	75°78	5	2°143
2159	33301	7.5	18 2 46.51	70°81	3	3°350
2160	33341	5.9	18 2 47.04	69°58	1	+ 2°418

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2116 2117 2118 2119 2120	88° 52′ <b>0</b> 2″·7 88 51 17·7 74 38 33·2 95 53 51·6 41 34 13·4	72.51 70.00 71.48 78.20 67.98	1 2 5 3 2	+1":26 1:25 1:16 1:09	W 886, L <sub>1</sub> 5835, Gl 4406. W 892, L <sub>1</sub> 5837, Gl 4407. W 917, L <sub>8</sub> 2491. [3775. T 8286, Ar 3638, RU
2121 2122 2123 2124 2125	45 3 35.6 62 46 28.5 93 25 51.7 78 50 11.8 73 39 57.7	72.13 77.45 76.51 66.28 76.13	5 2 3 5 5	1.03 1.06 1.09	W 1511 W 1493, R 6090. W 946, Si <sub>B</sub> L <sub>2</sub> 2498. See <i>Notes</i> .
2126 2127 2128 2129 2130	87 54 9'4 68 21 57'4 76 17 48'9 68 29 15'6 70 5 30'1	68·47 76·53 71·33 80·48 74·12	5 1 5 1	0.93 0.90 0.85 0.80 0.79	[L, 5871, Gl 4425. W 981, R 6107, Sp6452, W 1568. W 1012, R. W 1600, R. W 1604, R 6127.
2131 2132 2133 2134 2135	76 0 26·1 52 43 54·2 65 59 25·7 75 59 19·6 56 35 0·2	76.53 72.52 69.89 80.55 76.98	2 4 5 1 4	oʻ76 oʻ70 oʻ69 oʻ63	W 1033. W 1647, B 371. W 1635. W 1057.
2136 2137 2138 2139 2140	76 5 2.8 89 21 40.7 92 34 15.3 74 53 49.7 46 45 38.0	81.53 68.49 71.51 68.30 75.12	1 2 2 6 5	°.57 °.53 °.49 °.41 °.36	W 1092. L, 5913. [6491,Gl4451. W 1110, Si,, Si, 966, Sp W 1137. W 1770, RC 3806.
2141 2142 2143 2144 2145	98 10 41.0 95 22 17.8 59 21 8.3 56 41 14.5 73 11 19.6	62·30 77·45 77·30 71·75 71·08	5 5 5 5	0°35 0°30 0°26 0°25	See Notes. W 1797.
2146 2147 2148 2149 2150	75 54 31.8 59 39 13.1 75 13 22.9 101 1 37.8 63 21 3.5	73'13 68:46 76:53 81:53 72:09	5 3 1 1 5	0.10 0.13 0.19 0.19	W 1192.  W 1215, PM 2043.  W 1203, Si <sub>0</sub> 1982, L,  W 1848, R. [2293.
2151 2152 2153 2154 2155	59 36 66 3 41'4 90 27 15'8 83 35 58'4 81 7 49'7	77.77 70.31 79.18 71.94	4 5 3 5	0.08 0.04 -1 0.03 -0.06 0.08	W 1872. Si <sub>5</sub> 975, L. 5967. L <sub>1</sub> 2924. See Notes.
2156 2157 2158 2159 2160	101 45 33'6 64 38 4'7 55 11 21'3 101 44 37'3 63 54 58'2	80.55 76.51 74.56 72.46 69.58	1 6 3 1	0°18 0°24 0°24 -0°24	W 1289,Sp 6557,L <sub>6</sub> 2312. W 12. W 34. W 1310,Si <sub>6</sub> 1989,L <sub>5</sub> 2317. See <i>Notes</i> .

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2161 2162 2163 2164 2165	33318 33342 33345 33402 33376	8·0 7·7 7·0 5·9 6·0	18 <sup>h</sup> 3 <sup>n</sup> 18 3 18 3 18 3	7°.60 28.32 37.63 42.07 25.40	66·59 79·01 77·84 66·92 70·68	1 2 3 5 5	+3*.063 2.929 2.927 2.087 2.995
2166 2167 2168 2169 2170	33412 33438 33472 33461 33449	6·0 7·2 6·0 6·8 6·0	18 4 18 5 18 5 18 6 18 6	33.97 15.45 37.87 24.42 45.	74.50 69.52 76.59 74.71	5 6 3 5	2.677 2.626 2.085 3.007 3.655
2171 2172 2173 2174 2175	33493 33505 33482 33490 33543	8·1 6·9 6·0 7·5 7·0	18 7 18 7 18 7 18 7 18 7	21.36 36.16 46. 47.63 58.58	71.20 63.00 70.30	4 2 2 5	3°057 2°792 3°569 3°441 2°534
2176 2177 2178 2179 2180	33515 33571 33618 33640 33629	7'5 7'4 6'0 7'0 7'0	18 8 18 8 18 8 18 9 18 10	10°10 36°42 54°64 52°97 55°96	80·48 76·58 70·89 76·84 69·15	1 4 5 3 5	3.069 2.579 2.000 2.326 3.378
2181 2182 2183 2184 2185	33 <sup>6</sup> 97 33 <sup>6</sup> 83 33773 337 <sup>1</sup> 9 33759	7.5 7.6 7.2 6.1 7.0	18 11 18 11 18 12 18 12 18 12	19.37 37.26 12.25 19.60 55.17	76·17 70·64 69·37 71·22 78·50	5 6 3 2	2·496 3·104 1·614 2·746 2·499
2186 2187 2188 2189 2190	3373 <sup>1</sup> 33780 3379 <sup>2</sup> 33820	5·8 7·0 6·9 7·3 7·7	18 13 18 13 18 13 18 13 18 14	7. 17.22 39.19 45.66 15.42	65·85 75·54 66·05 77·37	6 4 2 5	2·904 3·260 2·695 2·792 2·206
2191 2192 2193 2194 2195	33827 33858 33847 33850 33896	6·9 7·1 7·0 7·5	18 15 18 15 18 15 18 16 18 16	19.97 24.53 55.83 18.52 21.15	67·46 73·3² 70·93 81·53 67·71	5 5 5 5	2·946 2·513 3·101 3·364 2·451
2196 2197 2198 2199 2200	33 <sup>8</sup> 97 339 <sup>2</sup> 9 33937 33941 33955	7.5 7.3 7.4 6.5 7.3	18 16 18 16 18 16 18 17 18 17	29.88 35.13 43.06 28.62 36.10	80.55 73.35 75.38 70.24 78.19	5 5 6 3	2.548 2.212 2.212 2.674 2.563
2201 2202 2203 2204 2205	33997 33959 34021 34061 34078	7'3 6'5 5'8 7'7 8'2	18 18 18 18 18 19 18 19 18 19	5.32 28.17 37.85 39.61 54.50	71'91 67'14 71'29 73'97 77'92	5 6 4 5 3	2.073 3.111 2.886 2.159 +2.167

No.	Mean N.P.D. 1875 0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2161	89° 37' 35″ 5	66.59	1	-0":27	W 13, R 6250. L <sub>1</sub> 6006.
2162	83 52 23 0	79.01	2	0:30	W 24, PM 2057, L <sub>2</sub> 2961, Gl
2163	83 48 53 0	77.84	3	0:32	W 29, L <sub>9</sub> 2967. [4491.
2164	53 36 34 7	67.90	5	0:32	W 76.
2165	86 41 54 3	70.68	5	0:39	W 46, L <sub>2</sub> 2976.
2166	73 32 44.7	74.50	2	0·40	PM 2062.
2167	71 31 12.3	71.33	5	0·46	W 108.
2168	53 33 28.0	76.59	3	0·49	W 137, R 6287, Y 7692.
2169	87 12 57.0	74.71	5	0·56	Sp 6598, L <sub>1</sub> 6037.
2170	111 44 40.8	67.03	2	0·59	See Notes.
2171 2172 2173 2174 2175	89 20 49.2 78 8 51.2 110 25 20.7 105 25 6.5 68 9 13.9	71.53 76.51 64.28 65.47 70.30	4 1 4 2 5	0.64 0.67 0.68 0.68 0.70	R 6302, Sp 6606, L <sub>1</sub> R 6309. [6049. T 8429, Ar 3703, N7yr Oe 17901. [2013.
2176	89 51 29°2	80·48	1	0.71	W 136, R 6317, Si,, Sp
2177	69 45 27°0	76·58	4	0.75	[6621, L <sub>2</sub> 6061.
2178	51 15 37°3	70·89	5	0.78	R 6338, Y 77??.
2179	60 49 18°0	76·84	3	0.86	W 254, R 6347.
2180	102 54 48°8	69·90	5	0.95	W 198, Si <sub>4</sub> 1622, L <sub>5</sub> 2347.
2181 2182 2183 2184 2185	66 38 39°1 91 22 31°3 42 28 49°7 76 16 8°9 66 45 0°1	76·17 70·64 72·55 70·55 78·50	5 5 4 4 2	0.99 1.02 1.08 1.13	W 291. W 228, Si <sub>2</sub> , Si <sub>5</sub> 992, L <sub>1</sub> Oe 18053. [6092. W 253, Bn. R 6388.
2186	82 47 17.9	68·49	1	1.15	See Notes. [L <sub>3</sub> 2631.
2187	98 1 53.3	68·49	4	1.16	W 265, PM 2077, Si <sub>2</sub> ,
2188	74 13 24.8	75·54	4	1.19	W 350, R 6394.
2189	78 10 46.9	63·20	3	1.20	Ar 3729.
2190	57 0 16.2	77·37	5	1.25	W 376.
2191 2192 2193 2194 2195	84 37 10·2 67 15 26·5 91 15 35·9 102 21 37·7 65 0 3·5	67.69 73.32 70.93 81.53 67.71	4 5 5 1 5	1.34 1.35 1.42 1.43	R 6419, L <sub>2</sub> 3153. W 406, PM 2085. W 324, Si <sub>6</sub> 1000, L <sub>1</sub> 6126. W 332, Si <sub>6</sub> 1018, Sp 6996, [L <sub>5</sub> 2382.
2196 2197 2198 2199 2200	68 33 1.0 57 10 36.7 57 7 7.0 73 22 22.6 69 5 51.8	80·56 73·35 75·38 70·24 78·19	3 5 5 6 3	1.44 1.45 1.46 1.53	W 440. W 468, R 6454. W 475.
2201	53 9 32'9	73.52	4	1.58	W 499, R 6464, Y 7796.
2202	91 38 42'0	70.26	5	1.61	W 391, Si <sub>8</sub> , Si <sub>5</sub> 1008, L <sub>1</sub> 6148.
2203	82 2 11'5	71.35	5	1.71	W 427, Si <sub>1</sub> , L <sub>2</sub> 3191.
2204	55 34 18'0	73.97	5	1.72	W 541, R 6484.
2205	55 48 2'1	77.92	3	-1.74	W 548.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	- Epoch.	Obs,	Ann. Prec.
2206 2207 2208 2209 2210	34067 34074 34066 34131 34130	6·5 7·3 6·1 7·1	18 <sup>h</sup> 20 <sup>m</sup> 18 20 18 20 18 21 18 21	0:·27 13·16 23·48 9·51 17·33	80·56 76·32 70·52 74·32 80·03	2 4 5 5 2	+ 2°·384 2·517 2·698 2·311 2·420
2211 2212 2213 2214 2215	34115 34128 34159 34180 34196	6·7 6·5 7·7 6·8 7·6	18 21 18 21 18 22 18 22 18 23	36.78 52.40 17.58 37.82	81.53 67.67 78.55 66.72 77.38	6 4 5 5	2.987 2.929 2.608 2.463 2.718
2216 2217 2218 2219 2220	34178 34217 34226 34218 34221	7.0 6.8 6.5 7.5 8.5	18 23 18 23 18 23 18 24 18 24	33.36 43.51 50.67 29.69	71.51 73.97 80.24 70.05	4 5 3 5	3.207 2.746 3.643 3.328 3.536
2221 2222 2223 2224 2225	34248 34294 34288 34223 34301	7.0 8.2 6.5 7.7 7.2	18 24 18 24 18 25 18 25 18 25	56·27 57·74 20·34 52·91 57·43	74'39 80'48 75'77 77'45 81'22	5 1 5 1 3	3.085 2.221 2.569 2.224 2.916
2226 2227 2228 2229 2230	343 <sup>22</sup> 343 <sup>19</sup> 343 <sup>07</sup> 343 <sup>50</sup> 343 <sup>86</sup>	8·2 6·8 8·0 6·2 7·1	18 26 18 26 18 26 18 27 18 27	13°13 25°53 27°98 23°01 47°27	78·31 71·55 70·79 72·55 80·58	4 6 5 5	2.511 2.750 3.194 2.881 2.620
2231 2232 2233 2234 2235	34341 34418 34391 34440 34424	7.5 5.5 7.5 7.5 6.7	18 27 18 28 18 28 18 28 18 28	53°05 3°05 19'93 37'50 54'83	60·51 72·73 80·55 79·38 67·71	2 5 1 5 5	3.480 2.581 3.005 5.819
2236 2237 2238 2239 2240	34436 34456 34485 34463 34497	6·5 7·5 7·5 6·1 7·8	18 28 18 29 18 29 18 29 18 29	56.95 27.68 37.53 42.64 57.49	72.24 80.91 72.09 76.25 72.15	5 3 4 5 5	2·580 2·553 2·166 2·639 2·168
2241 2242 2243 2244 2245	34429 34486 34529 34999 34536	8.0 5.8 6.4 5.5 6.9	18 29 18 30 18 30 18 31 18 31	58.09 34.31 42.40 10.61 19.85	70°51 79°97 68°56 78°59 70°45	5 3 2 4	3.597 2.919 2.166 3.081 2.537
2246 2247 2248 2249 2250	34488 34538 34569 34590 34637	7.0 6.1 6.5 6.7 7.7	18 31 18 31 18 33 18 33 18 34	26· 32·65 13·76 27·68 22·51	80.08 74.21 75.58 76.58	2 6 4 5	3.584 2.690 3.256 2.953 + 2.655

	No.	Mean N.	P.D. 1875·0.	Epoch.	Obs.	Ann. Prec.	Authorities.
	2206	62° 67	40' 24"°1 21 43'9	80·56 76·57	2 5	-1".75 1.77	PM 2090.
1	2208	74	18 35.8	70.2	5	1.78	
1	2209	60	14 30.3	74.32	5	1.85	Bn.
	2210	63	50 40.3	75.92	3	1.86	W 590, Ar 3758.
	2211	86	19 36.0	81.23	1	1.88	W 478, L. 3231, Gl 4531.
١	2212	83	52 49'9	69.09	5	1,00	RC 3917, L, 3236.
١	2213	70	46 51.2	78.55	4	1.95	W 607.
١	2214	65	22 45.8	68.52	5	1.08	W 620, PM 2095.
ı	2215	75	5 23.4	77.38	5	2.03	W 631, R 6525.
	2216	95	48 19'0	71.52	5	2.06	W 523, Si, L, 2681.
- [	2217	76	13 25.3	73.97	5	2.07	W 530.
	2218	72	5 45'9	80.54	3	2.08	W 050, K 0530, L <sub>6</sub> .
-	2219	100	52 47'1	70.05	5	2.14	See Notes.
	2220	109	12 37.0	58.24	I.	2.12	Ar 3774, Oe 18347, Bn.
1	2221	90	34 2.3	74'39	5	2.18	L, 6201.
1	2222	57	21 27.5	80.48	ī	2.18	W 697.
1	2223	69	15 38.6	75.77	5	2.51	W 700, R 6559.
١	2224	57	26 37.1	77.45	I	2.26	W 724.
ı	2225	83	18 18.4	81.53	3	2.27	L, 3309.
ı	2226	67	6 9.9	78.31	4	2.50	
1	2227	76	21 23.8	72.02	5	2.31	W 611.
١	2228	95	15 9.7	74.27	5	2.31	W 599, Sp 6803, L, 2694.
ı	2229		49 25.5	72.22	5	2.39	L, 3330.
١	2230	71	10 29.3	80.28	I	2.43	R 6588.
	2231	107	4 53.8	65.46	1	2'43	Т 8555, Ое 18417.
1	2232	59	32 17.9	72.73	5	2.45	See Notes.
ı	2233	86	57 34'5	80.22	1	2.47	W 651, L, 3344.
1	2234	59	12 6.6	79.38	5	2,20	W 818.
١	2235	79	12 15.9	67.71	5	2.22	W 668, R 6602, Gl 4550.
	2236	69	37 44'4	72.24	5	2.23	R.
١	2237	68	36 40.5	80.01	3	2.22	W 837, Bn.
ı	2238	55	38 53.4	72.09	4	2.29	W 853.
1	2239	71	53 41.2	76.22	5	2.29	W 845, L.
	2240	55	41 19.4	72.12	5	2.61	W 872.
	2241	111	35 51.2	70.21	1	2.61	Bn.
	2242	83	25 32.1	79.97	5	2.67	L, 3385.
	2243	55	38 31.5	70.01	4	2.68	W 893.
١	2244	90	24 47'I	78.59	2	2.72	R 6614, Sp 6852, L
	2245	67	59 41.1	70.47	5	2.73	W 902. [6253.
	2246	111	9 7.6	67:03	. 2	2.74	Ar 3805, L, B 392. W 905.
	2247	73	54 26.7	80.08	2	2.75	W 784, Si <sub>2</sub> , L, 2744.
	2248	97	54 2.5	74.16	5	2.90	W 796, Si, L, 3448, Gl
	2249	84	50 46.8	75.28	4	-5.88 5.85	[4570.]
	2250	72	30 34'9	76.28	5	2 99	[43701

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2251	34632	7:3	18h 34	23".89	70.24	4	+ 2*.868
2252	34636	6.7	18 34	29.74	72.06	6	2.793
2253	34643	7.5	18 34	47.04	78.10	5	2.870
2254	34653	7.3	18 35	8.62	80.91	3	2.969
2255	34665	7.6	18 35	19.36	76.23	I	2.789
2256	34700	7.5	18 35	26.61	71.12	5	2.045
2257	34674	6.5	18 35	39.82	79.82	4	2.789
2258	34664	. 7.0	18 35	51.40	66.35	5	3.539
2259	34754	6.2	18 36	57.98	71.57	5	2.264
2260	34709	7.0	18 37	6.94	73.38	5	3'233
2261	34765	7.7	18 37	7.20	76.22	3	2.183
2262	34715	7.5	18 37	8.46	80.20	I	3.110
2263	34740	8.3	18 37	44.10	80.48	I	3.110
2264	34767	7.2	18 37	46.5	77.76	5	2.660
2265	34717	7.0	18 37	50.62	68.56	2	3.282
2266	34777	6.4	18 38	7.12	73'97	7	2.791
2267	24779	7.2	18 38	30.32	68.54	5	3.084
2268	34853	5.2	18 39	9.68	66.77	5	2.255
2269	34820	6.3	18 39	19.69	74.12	6	2.948
2270	34836	8.1	18 39	36.22	78.59	4	2.805
2271	34822	6.0	18 39	49'42	73.60	2	3.310
2272	34890	6.9	18 40	17.30	70.31	5	2.244
2273	34899	6.9	18 40	35.03	77.51	5	2.635
2274	34960	7.8	18 40	42.02	71.65	I	1.767
2275	34906	7.5	18 41	2.13	80.60	2	2.783
2276	34931	4.9	18 41	2.19	74.61	5	2.415
2277	34925	6.4	18 41	12.37	72.95	5	2.630
2278	34995	8.2	18 41	41.32	71.23	I	1.917
2279	34951	7.0	18 41	45.43	80.30	4	2.667
2280	35016	6.0	18 42	13.19	73.05	6	1.917
2281	34978	8.1	18 42	20'40	76.57	2	2.829
2282	35042	7.0	18 42	39.38	69.59	1	1.829
2283	34981	8.0		48.28	73.23	5	3.098
2284	34985	8.0	18 43	0,			3.515
2285	35045	6.0	18 43	14.13	76.19	5	2.564
2286	35005	6.2	18 43	14.97	66.06	7	3.026
2287	35028	7.0	18 43	29.33	71.85	4	2.732
2288	35044	7.1	18 43	36.81	77.60	3	2.267
2289	35051	8.4	18 44	6.64	80.61	1	2.829
2290	35074	6.4	18 44	52.78	66.97	5	2.821
2291	35105	7'1	18 45	13.30	74'54	1	2.489
2292	35150	5.9	18 46	18.07	69.74	5	2.750
2293	35192	7:3	18 46	28.58	77'23	3	2.148
2294		6.0	18 46	32.			3.288
2295	35189	6.2	18 46	40.93	71.05	4	+2.357

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2251 2252 2253 2254 2255	81° 14′ 39″ 3 78 3 29°2 81 19 23°3 85 33 22°5 77 54 20°5	71.68 72.06 78.10 80.91 76.53	6 6 5 3	-3"·00 3·01 3·06 3·06	See Notes. W 827, Sp 6885, Gl4576. W 836, Si, L <sub>2</sub> 3473. Sp 6891, L <sub>2</sub> 3481. W 849, Gl 4579.
2256 2257 2258 2259 2260	52 7 21.7 77 52 49.8 97 11 31.0 58 30 4.9 96 56 21.5	71.15 79.82 67.79 71.57 73.38	5 4 4 5 5	3'09 3'11 3'12 3'22 3'33	[Gl 4582. W 857, T8601, Ar 3819, W 854, L <sub>0</sub> 2774. W 1091. W 897, Si <sub>4</sub> , L <sub>0</sub> 2787.
2261 2262 2263 2264 2265	56 I 13.2 91 40 53.3 91 40 41.8 72 37 54.7 111 7 34.7	76·55 80·59 80·48 77·76 71·54	3 2 1 5	3.23 3.29 3.29 3.30	W 1101, Bn. W901, Si <sub>6</sub> 1045, L <sub>1</sub> 6317. W 918, Si <sub>6</sub> 1046, L <sub>1</sub> 6326. W 1111. Oe 18623, L <sub>6</sub> , Y 7936.
2266 2267 2268 2269 2270	77 57 16·8 90 29 55·3 58 11 40·2 84 37 41·4 78 31 47·8	71.55 70.55 69.80 74.15 78.59	10 4 5 6 4	3·3 <sup>2</sup> 3·35 3·4 <sup>1</sup> 3·4 <sup>2</sup> 3·45	Ar 3831, Bn. [Gl 4592. W 942, R 6654, L,6337, Sp 6938, L, 3547. W 973, L,1076, Gl 4597.
2271 2272 2273 2274 2275	100 15 21'4 68 8 42'1 71 38 34'6 45 14 20'3 77 34 42'4	81.62 70.31 77.21 71.65 80.60	1 5 5 1 2	3.47 3.51 3.53 3.55 3.57	[6941, L <sub>6</sub> 2515. W 970, Si <sub>2</sub> , Si <sub>5</sub> 2060, Sp W 1188, Bn. R 6702, L <sub>6</sub> . [18593. W 1224, Ar 3850, Oe W1009,L41087, Gl4609.
2276 2277 2278 2279 2280	63 28 13.3 71 25 32.5 48 43 37.0 73 13 32.2 48 41 29.0	74.61 72.95 71.53 80.30 72.70	5 5 1 4 7	3.57 3.59 3.63 3.63 3.67	W 1218. W 1257, RC 4053. W 1241. W 1276, RC 4058.
2281 2282 2283 2284 2285	79 29 38·5 46 34 26·6 91 7 13·2 96 5 2·9 58 22 49·7	76·57 67·65 73·53 67·53 76·19	2 2 5 1 5	3.68 3.71 3.72 3.74 3.76	L, 1103. W 1291, RO 4063. See Notes. [Y 7981. W1058,Ar3857,L <sub>2</sub> 2844, R 6751.
2286 2287 2288 2289 2290	89 18 11·5 75 28 53·5 68 58 21·2 79 31 34·3 79 10 6·4	68·28 72·01 77·60 80·61 69·87	5 5 3 1 4	3.76 3.78 3.79 3.83 3.90	Sp 6972, L, 6392.  W 1302, PM 2167.  W1096, L,1118,Gl4621. W1115,PM2170,L41122.
2291 2292 2293 2294 2295	66 2 15.7 76 10 55.9 55 45 12.1 111 30 36.5 61 21 52.6	70'14 69'88 77'23 67'54 70'96	2 6 3 2 5	3.93 4.04 4.04 4.04	R 6772. W 1152, Gl 4629. W 1398. [2073, Y 8002. T 8674, Ar 3873, N 7yr W 1401, R 6795.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2296 2296 2298	35204 35222	8·2 7·7 6·3	18 <sup>h</sup> 47 <sup>m</sup> 18 47 18 47	10.16	71.57 79.59 72.61	1 5 5	+2'.357 2.437 2.108
2300	1	7.6 7.5	18 47	33.33	78·57 80·61	7 1	2·853 2·073
2301 2302 2302 2302 2305	35237 35271 4 35279	7°1 7°5 7°0 6°5 6°2	18 48 18 48 18 49 18 49 18 49	27.03 39.66 8.55 9.64	78·94 79·07 75·19 65·27 69·00	3 2 5 4 5	2.725 -2.853 2.718 2.585 2.385
2300 2300 2300 2300 2310	35284 35303 35281 35334	7.0 6.5 6.5 4.0 7.5	18 49 18 49 18 49 18 50 18 50	41.46 47.28 53.19 0.14 5.96	73.78 77.00 80.24 70.31 71.16	5 5 3 4 5	2.912 2.741 3.117 2.980 2.289
2311 2312 2313 2314 2315	35392 3 35416 4 35407	7.0 5.5 7.0 7.5 7.5	18 50 18 50 18 51 18 52 18 52	32.25 51.92 37.36 2.88 15.20	80.60 77.95 72.18 78.01 81.58	2 5 5 5	2.652 1.921 1.903 2.439 3.184
2316 2318 2318 2319 2320	35421 35461 35452	6·8 5·8 7·6 8·0 7·5	18 52 18 52 18 52 18 52 18 52 18 53	16.92 40.87 52.12 54.	70·31 70·80 76·21	5 5 5	2.934 2.669 2.032 2.233 2.478
2323 2323 2323 2324 2324	35445 35434 4 35488	8·5 5·8 6·5 6·8 6·6	18 53 18 53 18 53 18 53 18 53	9. 18.88 21.92 59.80 6.19	73 <sup>-</sup> 4 <sup>1</sup> 74 <sup>-</sup> 78 69 <sup>-</sup> 85 79 <sup>-</sup> 59	5 5 4 2	2·232 2·608 2·844 2·321 2·697
2326 2326 2326 2326 2336	35511 35507 35590	7.5 5.8 6.5 7.5 6.4	18 54 18 54 18 54 18 55 18 55	32.52 39.84 41.94 32.64 42.99	71.81 68.36 76.00 76.99 74.99	4 5 5 7	3°177 2°437 2°531 1°869 3°530
233 233 233 233 233	35561 35584 4 35604	7.0 6.7 6.2 6.8 6.5	18 55 18 55 18 56 18 56 18 56	47.73 56:84 12:58 18:64 20:77	74·20 70·57 68·11 74·08 79·17	5 5 4 5	2.211 2.565 2.436 2.210 2.885
233 233 233 233 234	35598 35707 35655	4·8 6·0 5·5 6·8 7·3	18 57 18 57 18 57 18 58 18 58	4.91 12.78 54.14 0.20 11.47	80·55 72·02 66·94 75·82 72·56	5 5 4 3	1·508 3·035 1·696 2·674 + 2·451

No.	Mean N.P.D, 1875	O. Epoch.	Obs.	Ann. Prec.	Authorities.
2296 2297 2298 2299 2300	61° 22' 50". 64 7 23. 53 36 35. 80 29 36. 52 38 0.	7 79.59 4 72.61 78.59	5 5 7 1	-4.09 4.10 4.13 4.14	W 1413. W 1418. W 1186, L, 1148, Gl 4632.
2301 2302 2303 2304 2305	75 8 49° 80 28 7° 74 48 48° 69 32 26° 62 14 36°	9 79.07 9 75.19 5 69.07	3 2 5 6 5	4.21 4.23 4.26 4.27 4.28	W 1444, L <sub>4</sub> 1158. W 1213, Sp 7030, L <sub>4</sub> W 1469. [1160.
2306 2307 2308 2309 2310	82 58 557 75 46 217 91 57 333 85 57 263 59 0 38	5 77.00 5 80.24 70.31	5 5 3 4 5	4.31 4.32 4.33 4.34 4.35	$\begin{array}{l} {\rm See} \ \textit{Notes}. \\ {\rm W} \ \textit{1251}, R 6855, Bn, Gl \\ {\rm Bn}, \ L_1 6465. \\ {\rm W} \ \textit{1252}, T 8701, R 6858, \\ & \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
2311 2312 2313 2314 2315	72 9 54 48 33 233 48 6 93 64 4 73 94 53 373	77.18 78.01	2 5 5 5 1	4.39 4.41 4.48 4.51 4.53	W 1522, R 6868. W 1551, T <sub>2</sub> , RO 4125. W 1583, Bn. PM 2191. W 1297, Si <sub>2</sub> , L <sub>8</sub> 2955, Gl
2316 2317 2318 2319 2320	83 55 21.8 72 48 20.3 51 22 0.8 57 10 37.3 65 27 30.3	70.80 76.21 59.59	6 5 5 4 2	4.53 4.57 4.59 4.59 4.60	[4658. W 1303, L <sub>2</sub> 3753, Gl <sub>4</sub> 659. W 1593. Ar 3909. W 1606.
2321 2322 2323 2324 2325	57 15 26.3 70 22 26.1 80 1 41.8 59 59 45.2 73 54 52.8	73.41 74.78 70.54	4 5 5 3 2	4.61 4.62 4.63 4.68 4.69	Ar 3911. W 1610. W 1329, L, 1195, Gl [4666.
2326 2327 2328 2329 2330	94 36 47.4 63 56 27.1 67 21 29.5 47 9 35.0 109 25 26.6	76.00 76.00	6 5 5 6	4.73 4.74 4.74 4.81 4.82	W 1355, Si., R 6936, Sp [7092, L <sub>3</sub> 2987. W 1660, L <sub>6</sub> . Y 8087.
2331 2332 2333 2334 2335	56 25 57.6 68 39 43.6 63 53 5.6 56 22 26.9 81 48 18.1	70.57 69.05 74.08	5 5 4 4 5	4.83 4.84 4.87 4.88 4.88	W 1715 R 6970. W 1721. W 1725. W 1408, L <sub>4</sub> 3819, Gl4685.
2336 2337 2338 2339 2340	39 38 34'3 88 21 36'6 43 14 28'4 72 54 1'5 64 21 21'3	72.02 68.94 75.82	5 5 4 3	4.94 4.95 5.01 5.02 -5.04	Oe 18838. W 1431, L 6545. Oe 18849, RC 4171 W 1773, R 7014. W 1788.

No.	Lalande.	Mag.	Mean	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2341	35684	7.3	18h	58m	35"-27	78.62	4	+28.668
2342	35666	6.2	18	58	50.05	69.90	6	3.111
2343	25709	7.5	18	59	13.94	73.04	4	2.712
2344	35665	7.5	18	59	27.			3.612
2345	35737	8.3	18	59	36.53	75.06	2	2.453
2346	35779	6.0	19	0	11.97	76.09	4	2.279
2347	35812	6.2	19	0	54.93	70.87	3	2.332
2348	35814	7.8	19	1	16.28	76.27	5	2.233
2349	35770	8.0	19	I	24.72	80.24	1	3'373
2350	35821	7.2	19	I	33.93	74.61	5	2.252
2351	35799	7.0	19	1	34.01	72.30	6	2.918
2352	35810	7.5	19	I	52.77	71.16	5	3.047
2353	35817	7.7	19	1	59.49	78.37	4	2.297
2354	35830	7.7	19	I	59.20	80.28	2	2.400
2355	35851	5.2	19	2	20.91	76.61	8	2.686
2356	35857	7:3	19	2	24 83	70.99	5	2.915
2357		6.2	19	2	25.			3.241
2358	35926	7.5	19	2	58.70	69.58	3	2.198
2359	35880	6.2	19	3	4.61	80.61	3	2.687
2360	35870	6.6	19	3	5.45	77.00	5	2.820
2361	35929	7.0	19	3	25.12	78.55	4	2.200
2362	35872	7.0	19	3	25.94	70.88	6	3.086
2363	36027	6.9	19	3	58.81	60.26	2	2.033
2364	35957	7.0	19	4	0.63	70.21	5	2.327
2365	36004	7.8	19	4	9.22	73.13	2	1.841
2366	35995	8.2	19	4	27.92	68.05	2	2.193
2367	35999	6.2	19	4	29.26	70.33	4	2.193
2368	35972	7.5	19	4	54.46	77.99	5	2.842
2369	35968	7.5	19	4	55.42	73.23	5	2.960
2370	36015	7.4	19	5	22.35	76.51	5	2.281
2371	36045	6.8	19	5	26.41	72.61	5	2.120
2372	36008	7.0	19	5	46.19	80.11	2	3.018
2373	36053	6.0	19	5	53.77	81.64	I	3.256
2374	36022	8.1	19	6	19.68	68.20	8	2.441
2375	36076	7.7	19	6	31.94	74.88	4	2.446
2376	36082	7.5	19	6	39.20	79.01	6.	2.446
2377	36130	8.0	19	6	55.38	67.97	5	1.936
2378	36081	7.0	19	6	58 28	74'35	4	2.690
2379	36106	6.0	19	7	12.00	81.50	3	2.245
2380	36099	6.0	19	7	34.62	70.95	5	2.953
2381	36146	7.0	19	8	26.74	80*36	4	2.812
2382	36193	7.8	19	8	28.	-0.0.		2.029
2383	36147	7.0	19	8	37.04	78.81	5	2.942
2384	36224	6.2	19	8	43.81	70.60	6	1.695
2385	36179	6.9	19	8	45.61	72.47	0	+ 2.462
		1	1			1	1	

No.	Mean N.P.D. 1875 0.	Epoch.	Obs.	Ann. Prec.	Authoritics.
2341 2342 2343 2344 2345	72° 37′ 49″·6 91 41 56·0 74 27 0·8 112 41 13·9 64 24 0·5	78·62 71·64 73·04 62·16 75·06	4 6 4 2	-5"*07 5'09 5'12 5'14 5'16	W 1796. R 7031, L <sub>1</sub> 6575. W 1817. [10383. Ar 3931, Oe 19069, St
2346 2347 2348 2349 2350	58 26 27.2 60 16 3.6 67 17 59.6 103 9 1.3 68 1 3.2	76.09 70.87 76.57 80.54 74.61	4 3 5 1	5.21 5.27 5.30 5.31 5.32	W 1868, T <sub>s</sub> . W 1885, Ar 3938, Bn W 1895, R 7078, L <sub>s</sub> . W 1547, Si <sub>4</sub> 1709, L <sub>5</sub> 2683, Y W 1906, PM 2227, [8151.
2351	83 12 35'1	72·30	6	5'32	Bn, L <sub>1</sub> , 3920.
2352	88 53 45'2	71·16	5	5'35	W 1572, Si <sub>1</sub> , L <sub>1</sub> , 6613, Gl
2353	69 45 46'0	78·37	4	5'36	See <i>Notes</i> . [4707.
2354°	73 54 14'9	80·58	2	5'36	W 1919, R 7091.
2355	73 19 54'4	76·61	8	5'39	See <i>Notes</i> .
2356	70 19 53.8	70'99	5	5'39	R 7102, L <sub>6</sub> ,
2357	109 59 56.2	67'80	4	5'39	T 8793, Ar 3945, Oe
2358	55 48 11.1	69'07	6	5'44	W 38. [19165, Y 8160.
2359	73 20 34.2	80'61	3	5'45	W 29, R 7116.
2360	78 54 14.4	77'00	5	5'45	L <sub>4</sub> 1266.
2361	66 I 6.0	78.55	4	5'48	W 49, R 7121.
2362	90 37 38.3	74.63	4	5'48	See <i>Notes</i> .
2363	51 2 36.7	65.73	1	5'52	W 78, T 8811, Ar 3961.
2364	59 53 51.2	70.51	5	5'53	Ar 3960.
2365	46 13 52.2	71.00	3	5'54	W 91.
2366 2367 2368 2369 2370	55 36 24.7 55 36 21.2 79 51 23.8 85 1 25.6 69 0 53.5	68.05 70.33 77.99 73.13 76.21	2 4 5 4 5	5°57 5°57 5°60 5°60 5°64	PM 2246. See <i>Notes.</i> [Gl 4725. W64,Si <sub>1</sub> ,R7143,L <sub>2</sub> 3973, W 111, R 7156.
2371	54 32 30°0	72.61	5	5.65	W 123. [L <sub>1</sub> 6651,Gl4728.
2372	87 35 0°9	80.11	2	5.68	W85, PM 2249,Sp7197,
2373	98 8 48°1	81.64	1	5.69	R7159, L <sub>3</sub> 3998, Y8181,
2374	63 48 32°4	71.22	6	5.72	Bn. [St 10433.
2375	63 55 39°8	74.88	4	5.74	W 159.
2376	63 57 27.4	79°01	6	5.75	W 165, PM 2250.
2377	48 25 49.3	69°76	5	5.76	RC 4217.
2378	73 21 43.8	74°35	4	5.77	W 170.
2379	68 39 16.9	81°20	3	5.80	T <sub>2</sub> Gl 4738.
2380	84 41 41.9	70°95	5	5.83	W 145, Bn, L <sub>2</sub> 4020.
2381	78 30 2.0	80·36	4	5.88	[1317, Gl 4744.] W168,R7217,Sp7229,L4 W 232, Ar 3981. W 169, Bn, L, 4036, Gl [4746.]
2382	50 42 47.3	58·84	5	5.91	
2383	84 9 56.7	78·81	5	5.91	
2384	42 50 8.7	70·80	5	5.92	
2385	64 27 15.6	72·47	6	-5.93	

No.	Lalande.	Mag.	Mean R.A. 1875 0.	Epoch.	Obs.	Ann. Prec.
2386 2387 2388 2389 2390	36160 36199 36173 36207 36237	7·8 7·4 8·0 6·1 6·3	19 <sup>h</sup> 8 <sup>m</sup> 46 <sup>s</sup> ·42 19 9 8·77 19 9 27·91 19 9 38·31 19 10 2·15	75.58 76.40 76.03 70.83 80.61	6 5 5 4 3	-+ 2**895 2*482 3*273 2*733 2*650
2391 2392 2393 2394 2395	36282 36268 36271 36353 36409	5.8 5.9 7.0 6.1 6.7	19 10 33°14 19 10 43°38 19 11 35°31 19 12 26°26 19 13 3°75	78·56 75·95 67·78	3 2 3 5 5	2·327 2·747 3·408 2·537 2·048
2396 2397 2398 2399 2400	36447 36385 36432 36435 36376	5°5 7°0 6°7 7°2 7°0	19 13 49'37 19 13 58'43 19 14 2'24 19 14 6'25 19 14 17'	76·21 80·20 71·28 77·20	5 5 7 5	2·799 3·106 2·426 2·434 3·520
2401 2402 2403 2404 2405	36461 36428 36478 36466 36499	6·8 7·8 6·2 8·0 6·8	19 14 23.01 19 14 32.34 19 14 37.03 19 14 59.83 19 15 29.39	73.23 71.89 69.76 79.55 79.61	5 4 5 2 2	2°244 2°860 2°110 2°640 2°639
2406 2407 2408 2409 2410	36474 36489 36540 36502 36549	7.0 5.0 7.0 7.0 7.5	19 15 39.53 19 15 55.75 19 16 18.62 19 16 19.37 19 16 29.88	71·19 67·90 72·45 81·14 73·11	5 6 7 4 4	2·284 3·083 2·474 3·242 2·474
2411 2412 2413 2414 2415	36574 36570 36542 36532 36578	7.5 7.2 6.5 7.7 6.5	19 16 42.95 19 16 46.87 19 16 51.16 19 16 52.15 19 17 25.67	80.62	3 5 4 1	2.268 2.352 2.857 2.887 2.742
2416 2417 2418 2419 2420	36572 36654 36594 36663 36685	7.5 6.7 7.0 6.9 7.5	19 17 38:16 19 18 16:98 19 18 23:38 19 18 50:95 19 19 13:38	77.80 73.12 70.07	3 4 4 6 2	2.886 2.111 3.185 2.256 2.271
2421 2422 2423 2424 2425	36683 36666 36747 36688 36741	7.0 8.0 8.0 6.5 7.2	19 19 21'29 19 20 23'51 19 20 46'37 19 20 48'90 19 21 5'57	70.70 80.61 73.00	5 1 3 5	2·408 3·495 2·492 3·495 2·810
2426 2427 2428 2429 2430	36769 36719 36785 36751 36781	7.3 7.5 7.8 7.8 6.0	19 21 22 00 19 21 28 19 21 33 24 19 21 38 95	72'44 77'80	5 5 5 5	2.581 -3.417 2.431 3.030 +2.759

No.	Mean N P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2386 2387 2388 2389 2390	82° 7′ 9″ 0 65 12 3'4 98 54 27'9 75 7 55'9 71 42 6'0	75.58 76.40 76.03 70.77 80.61	6 5 5 3	5"'93 5'96 5'98 6'00 6'03	W 175, L <sub>2</sub> 4038, Gl 4747. [8206. W 187, Si <sub>2</sub> , L <sub>3</sub> 3134, Y W 200, R 7239. L <sub>6</sub> .
2391 2392 2393 2394 2395	59 41 26·8 75 40 30·6 104 45 47·1 67 11 53·7 51 6 8·6	68.60 78.56 75.95 72.10 72.11	5 2 3 4 4	6.08 6.09 6.16 6.23 6.28	[1247, L <sub>4</sub> 1335. PM 2262, R 7263, 6 yr Oe 19373, L <sub>5</sub> 2751. W 345. W 375.
2396 2397 2398 2399° 2400	77 51 17.6 91 32 30.6 62 58 1.1 63 17 45.6 109 27 56.0	76·21 80·20 75·79 77·20 67·57	5 5 5 5	6·35 6·36 6·37 6·37 6·39	See Notes. W 301, Si <sub>2</sub> , L <sub>1</sub> 6736. W 392. See Notes.
2401 2402 2403 2404 2405	56 50 19.5 80 29 26.8 52 47 3.5 71 8 3.7 71 5 23.3	73 <sup>2</sup> 3 71 <sup>2</sup> 6 69 <sup>8</sup> 2 78 <sup>6</sup> 2 79 <sup>2</sup> 8	5 6 4 1 3	6:40 6:41 6:42 6:44 6:48	W 324, L, 1364, Gl4762. W 409. W 431, PM 2277.
2406 2407 2408 2409 2410	58 8 0.4 90 29 13.6 64 37 51.4 97 38 15.0 64 39 38.5	71.19 71.60 73.20 81.14 73.11	5 4 5 4 4	6·50 6·52 6·55 6·55	[L <sub>1</sub> 6762, 9 yr 1768. W 357, Si <sub>5</sub> 1122, Sp 7296, W 460. W 365, Si <sub>2</sub> , L <sub>2</sub> 3206.
2411 2412 2413 2414 2415	57 33 25.8 60 19 48.9 80 19 41.8 81 37 50.1 75 19 3.8	75.96 77.60 81.16 80.62 75.80	3 5 2 1 5	6·59 6·59 6·60 6·65	W 480.  W 378, Si <sub>1</sub> , L <sub>4</sub> 1387. See <i>Notes</i> .  W 399, R 7373, L <sub>4</sub> 1395,
2416 2417 2418 2419 2420	81 34 46.2 52 39 30.2 95 7 38.6 57 1 30.9 57 31 11.8	80°92 77°80 72°61 69°99 77°65	3 4 5 7 2	6.66 6.72 6.73 6.76 6.79	W 401, Si, L <sub>2</sub> 4167, Gl W 524. [4774. W 412, Si <sub>2</sub> , Sp 7309, L <sub>2</sub> [3226.
2421 2422 2423 2424 2425	62 9 19'2 108 35 55'1 65 11 41'5 108 36 32'9 78 11 14'1	71.62 59.06 80.61 73.00 79.60	5 2 1 3 5	6.81 6.89 6.92 6.93 6.95	R 7416. Ar 4052, Oe 19572, L <sub>t</sub> . W 598. [19583, L <sub>t</sub> . T 8937, Ar 4057, Oe W 488, L <sub>4</sub> 1419, Gl 4789.
2426 2427 2428 2429 2430	68 35 46.9 105 21 15.2 62 55 48.5 88 4 36.9 75 58 6.8	77 <sup>2</sup> 1 65 <sup>9</sup> 4 72 <sup>4</sup> 4 77 <sup>8</sup> 0 75 <sup>5</sup> 9	5 4 5 5 5	6.97 6.98 6.99 -7.01	W 618. Ar 4063, Bn, L <sub>o</sub> , Y 8322. W 625, PM 2299. W 497, R 7453, L <sub>1</sub> 6837, See Notes. [Gl 4791.

No.	Lalande.	Mag.	Mean R.A	1875-0.	Epoch.	Obs.	Ann. Prec.
2431	36779	7.9	19 <sup>h.</sup> 21 <sup>n</sup>	- 51°-98	81.30	4	+2**801
2432	36789	7.1	19 21	23.21			2.664
	36821	6.2			73°39 66°15	5	2.675
2433			,	31.23		5	
2434	36800	7.5	19 22	35.72	76.12	2	2.883
2435	36783	7.0	19 22	37.58	80.28	I	3.359
2436	36791	7.0	19 22	37.63	72.84	5	3'233
2437	36813	6.9	19 22	53.92	70.60	5	3.072
2438	36843	7.8	19 23	9.78	80.48	I	2.800
2439	36892	6.4	19 23	12.97	71.67	2	2.106
2440	36862	7.5	19 23	13.83	69.57	2	2.497
2441	36890	7.0	19 24	17.79	71.84	5	3.003
2442	36923	7'3	19 24	33.01	80.00	4	2.257
2443	36919	7.5	19 24	43.16	80.64	2	2.794
2444	36922	6.7	19 24	44.31	77.27	6	2.704
		7.0		50.58		3	2.681
2445	36927	10	19 24	50 20	75.61	5	2 001
2446	36930	7.0	19 24	53.85	77.88	4	2.702
2447	36937	7.0	19 25	33.57	71.33	6	2.952
2448	36978	7.0	19 25	36.01	68.37	5	2.549
2449	36968	7.6	19 26	0.06	81.35	3	2.676
	36965	7.7	19 26	12.23	78.60	4	2.863
2450	30905	' '	19 20	12 53	78 00	4	2 003
2451	36963	7.0	19 26	13.40	74.61	5	2.873
2452	36995	6.2	19 26	14.41	72.62	3	2.456
2453	37014	7.0	19 26	33.59	79.62	2	2.59
2454	36992	8.0	19 27	5.97	70.91		3.181
2455	37019	6.9	19 27	36.19	66.55	3 6	2.959
2456	37064	6.8	19 28	2.07	72.64	5	2.282
2457	37077	6.9	19 28		70.63	5	2.328
	31011	6.2	1 ' ~	3°43 8°	1003	3	3.614
2458		0.5	1 ' ^		-6	_	
2459	37070	8.0	1 ,	9.03	76.42	5	2.240
2460	37068	8.6	19 28	31.22	77.94	3	2.843
2461	37081	7.1	19 28	43.77	76.51	5	2.839
2462	37057	6.0	19 28	44.83	69.79	6	3.540
2463	37158	8.3	19 29	41.40	74'10	4	2.391
2464	37140	6.0	19 29	45'42	71.00	5	2.733
2465	37150	7.4	19 29	45.86	78.82	5	2.246
2466	37206	7.0	19 30	11.55	72.23	5	1.974
2467	37156	6.8	19 30	13.79	81.16	2	2.835
2468	37216	7.0	19 30	43.58	66.17	5	2.552
2469		6.1	, ,			5	2.833
	37191	6.1	19 30	58.35	77'19		
2470	37198		19 31	9.46	80.63	4	3.178
2471	37242	6.8	19 31	43.65	77.62	5	2.281
2472	37207	6.5	19 31	51.58	69.87	5	3.599
2473	37246	6.7	19 31	51.44	75.80	5	2.656
2474	37274	7.1	19 32	10.52	77.88	4	2.412
2475	37251	8.0	19 32	10.20	81.64	2	+2.889

No.	Mean N.P.D. 1875.0	Epoch.	Obs.	Ann. Prec.	Authorities.
2431	77° 45′ 49″ '°	81.39	4	7":01	W 512, Sp 7344, L, 1427,
2432	71 57 18.2	73'39	5	7.01	R 7467, L <sub>6</sub> . [Gl 4794.]
2433	72 24 18.9	69'94	5	7.07	W 654, R 7478.
2434	81 23 24'7	76.12	2	7.07	See Notes. [L <sub>5</sub> 2865.
2435	102 54 5.3	80.28	I	7.07	W 520,Si, 1743,Sp 7352,
2436	97 17 57 1	72.84	5	7.08	W 522, Si <sub>2</sub> , Bn, L <sub>3</sub> 3260.
2437	90 0 31.5	70.60	5	7.10	Sp 7356, L, 6854.
2438	77 47 5'4	80.48	1	7.12	W 545.
2439	52 18 44.3	71.67	2	7.12	
2440	65 15 32.4	69.04	5	7.12	R 7493, Ar 4073.
			1		[4290, Gl 4810.
2441	86 48 53.3	71.84	5	7.21	W 573, Si <sub>1</sub> , Sp 7376, L <sub>2</sub>
2442	67 33 7.6	80.09	4	7.23	R 7500.
2443	77 26 29 1	80.64	2	7.24	Bn, Sp 7381, L, 1458.
2444	73 32 55.3	77.27	6	7.25	W 717.
2445	72 33 54.0	75.61	5	7.5	W 719.
	. 50 0,				
2446	73 27 30'7	77.88	4	7.26	W 724, Bn, L <sub>6</sub> .
2447	84 29 38'1	72.65	5 6	7.31	W 608, L <sub>2</sub> 4313, Gl 4818.
2448	56 31 52.2	69.59	6	7:32	
2449	72 18 19.3	81.32	3	7.35	W 757, R 7552.
2450	80 26 30 8	78.60	4	7:37	L, 1475.
	. 3	'		, ,,	
2451	80 55 47.0	74.61	5	7:37	L, 1476.
2452	63 38 49 0	73.38	4	7:37	W 770, R 7564.
2453	56 47 31.7	79.62	2	7:39	W 783.
2454	95 0 34.0	70.26	4 6	7.42	W 646, R, Si <sub>2</sub> , L <sub>3</sub> 3306.
2455	84 48 6.0	68.13	6	7.48	W 668, Bn, L <sub>2</sub> 4359.
2456	68 25 14.8	72.64	5	7.2	W 816.
2457	59 I 54.2	70.61	5 5	7.52	[19736, L <sub>6</sub>
2458	113 34 52.7	66.96	3	7.52	T 8990, Ar 4095, Oe
2459	66 46 15.6	76.42	5	7.52	Bn.
2460	79 33 27.1	77.94	3	7.55	L, 1503.
1 -400	19 33 2/1	1194	٥	/ 33	1 - 3 - 3
2461	79 19 6.4	76.51	5	7.57	[7438, L <sub>3</sub> 3324.
2462	97 43 51'2	71.60	5	7.57	W 689, 6 yr 1270, Sp
2463	61 7 11.4	74.10	4	7.65	W 882.
2464	74 39 47.7	71.60	5	7.66	R 7638, L <sub>6</sub> .
2465	68 6 53.3	78.82	5	7.66	R 7643, L6.
2466	18 20 12:2	70100	_	7.69	
	48 20 42'2	72.23	5		L. ICIO
2467	79 7 31.4	81.19	2	7.69	L, 1519.
2468	55 35 13.0	68.24	5	7.73	W 933. W 760, L, 1533, Gl 4853.
2469	79 0 15.3	77'19	5	7.75	D #668 AP 4118 BC
2470	94 55 29.6	80.63	4	7.78	R 7668, Ar 4118, RC <sub>2</sub> [1869, L <sub>3</sub> 3355.
2471	68 16 22.4	77.62	5	7.81	W 960, R 7690, L.
2472	100 26 12.4	69.87		7.82	PM2322,L,2947,Y8417'.
2473	71 18 8.5	75.80	5	7.82	W 065, R 7602.
2474	61 46 36.8	77.88	4	7.85	W 988.
2474	81 31 58.4	81.64	2	-7.85	W 787, L, 4449, G14859.
-4/3	31 30 4	01.04	_	, -3	

No.	Lalande.	Mag.	Mean R.A	. 1875.0.	Epoch.	Obs.	Ann. Prec.
2476 2477 2478	37 <sup>2</sup> 3 <sup>2</sup> 373 <sup>2</sup> 5 373 <sup>2</sup> 3	7.0 6.8 6.5	19 32 19 33	1 41 5.60 54.70 3.09	65·96 73·44 71·25	5 5 5	+ 18.821 2.101 2.520
2479 2480	37335 37292	7.8	19 33	17.86 42.05	70.72	5	3.192 3.132
2481 2482 2483 2484 2485	37356 37384 37375 373 <sup>8</sup> 7 37410	7.5 7.3 7.3 6.7 6.5	19 33 19 34 19 34 19 35 19 35	51·38 34·29 36·37 0·47 2·60	74.60 77.82 76.62 70.43 71.24	5 5 6 5	2·302 2·362 2·520 2·622 2·256
2486 2487 2488 2489 2490	373 <sup>6</sup> 3 37394 374 <sup>1</sup> 5 374 <sup>2</sup> 5 374 <sup>8</sup> 7	7.0 5.8 8.2 6.7 6.7	19 35 19 35 19 35 19 35 19 36	13.38 18.27 32.02 52.55 38.07	72.93 75.99 79.14 77.62 72.24	5 5 4 1 5	3·276 2·778 2·521 2·575 1·943
2491 2492 2493 2494 2495	37465 37472 37463 37495 37488	7.0 7.1 8.0 8.4 7.2	19 36 19 36 19 37 19 37 19 37	45'33 46'34 7'53 25'37 27'18	76·82 69·81 81·31 68·74 76·21	5 4 3 6 5	2.672 2.448 2.989 2.453 2.566
2496 2497 2498 2499 2500	375 <sup>1</sup> 3 375 <sup>2</sup> 7 375 <sup>2</sup> 1 37537 37504	7°1 6°0 7°0 6°2 7°5	19 37 19 37 19 38 19 38 19 38	50.88 55.88 2.96 14.38 19.98	72.04 75.82 78.12 77.10 71.03	5 4 4 4 5	2·522 2·308 2·576 2·359 2·973
2501 2502 2503 2504 2505	37639 37655 37686 37692	8·1 8·6 6·5 5·4 6·5	19 40 19 41 19 41 19 41	57.00 5° 24.40 40.79 47.56	79·26 70·76 77·01 75·42	3 5 5 5	2.579 2.824 2.513 2.275 2.301
2506 2507 2508 2509 2510	37676 37667 37710 37728 37730	7.0 8.1 6.2 7.2 7.5	19 41 19 41 19 42 19 42 19 42	53.67 58.98 34.35 55.42 58.27	74.00 80.56 72.40 75.41 78.62	5 2 4 5 2	2.598 2.865 2.508 2.444 2.448
2511 2512 2513 2514 2515	37753 37734 37766 37785 37747	6·1 7·3 7·0 7·0 7·0	19 43 19 43 19 44 19 44 19 44	1.44 6.76 1.48 3.96	71.67 76.97 80.55 76.61 80.58	5 3 1 5	2.128 2.518 2.448 2.231 3.178
2516 2517 2518 2519 2520	37758 37823 37842 37819 37866	7.0 7.3 7.5 7.5 7.0	19 44 19 45 19 45 19 46 19 46	13.55 38.40 43.29 3.19 17.28	77 <sup>1</sup> 3 73 <sup>6</sup> 1 76 <sup>2</sup> 2 80 <sup>6</sup> 2 72 <sup>1</sup> 0	5 5 1 7	2.912 2.531 2.209 2.923 + 2.154

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Anthorities
2476 2477 2478 2479 2480	44° 28′ 59″ 0 51 41 11.5 55 15 30.0 56 23 26.6 95 44 0.0	68·60 73·44 71·25 79·60 70·75	5 5 5 3 5	-7"·89 7·91 7·92 7·94 7·97	Oe 19440. R 7727, RC 4394. W 827, Si., R 7730, L <sub>3</sub>
2481 2482 2483 2484 2485	57 52 41.5 59 52 38.8 65 44 55.1 69 48 38.3 56 18 29.8	74.60 77.82 76.62 70.43 71.24	5 5 5 5	7:98 8:04 8:04 8:08	R 7749.
2486 2487 2488 2489 2490	99 28 52°1 76 28 23°9 65 43 1°1 67 50 16°6 47 12 45°1	76·87 75·99 79·14 77·62 72·24	4 5 4 1 5	8.09 8.10 8.12 8.15 8.21	W 868, Si <sub>2</sub> , Sp 7526, L <sub>5</sub> W 884, Gl 4876. W 1108. W 1122, L <sub>6</sub> . W 1165.
2491 2492 2493 2494 2495	71 49 38·4 62 54 35·4 86 7 14·5 63 2 26·8 67 26 32·8	76.82 69.74 81.31 70.37 76.21	5 5 5 5	8·22 8·22 8·25 8·27 8·27	W 1149,T9068, Ar4148, W 1156. [9yr 1806. W 927, Sp 7561, L <sub>2</sub> 4549.
2496 2497 2498 2499 2500	65 41 16.6 57 52 5.9 67 48 4.0 59 37 7.5 85 19 8.5	72.04 75.82 78.12 77.10 71.03	5 4 4 4 5	8·29 8·31 8·32 8·33	L <sub>e</sub> . [7572, L <sub>2</sub> 4572, Y 8480. W 958, PM 2343, Bn, Sp
2501 2502 2503 2504 2505	67 50 4°1 78 23 0°4 65 10 16°6 56 33 44°3 57 25 1°1	79°26 66°64 70°76 77°01 75°42	3 5 5 5 5	8·55 8·56 8·59 8·61 8·62	L <sub>0</sub> . Ar 4163. See <i>Notes</i> . [2183. W1326, PM 2360, N7yr
2506 2507 2508 2509 2510	68 32 8.0 80 16 4.9 64 55 25.9 62 26 50.5 62 36 22.8	74.00 80.56 72.40 . 75.41 78.62	5 2 4 5 2	8·62 8·63 8·68 8·71	W 1321, L <sub>r</sub> . W 1048, L <sub>4</sub> 1651. W 1346. 9yr 1816.
2511 2512 2513 2514 2515	51 54 2·6 65 18 0·9 62 34 22·5 55 0 9·2 95 0 34·0	71.67 72.88 80.55 76.61 80.58	5 4 1 5 1	8·71 8·72 8·79 8·79 8·81	W 1378, Y 8525. W 1370. W 1406. Note. W 1414. [3464. W 1092, R 7837, Si <sub>2</sub> , L <sub>3</sub>
2516 2517 2518 2519 2520	82 24 42.5 65 41 22.5 54 13 4.7 82 51 41.7 52 29 28.6	77'13 73'61 76'22 80'62 72'10	2 5 5 1 7	8.81 8.92 8.93 8.95 -8.97	Bn, L <sub>2</sub> 4666. W 1458. W 1147, L <sub>2</sub> 4698.

No	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
2521 2522 2523	37847 37851 37832	5 5 7 9 6 o	19 <sup>h</sup> 46 <sup>m</sup> 19 <sup>n</sup> ·72 19 46 23·47 19 46 45·69	70.60 76.62 70.98	5 5	+2*·058 2'459 3'144
2524 2525	37868 37855	5.7 6.2	19 46 46.05 19 47 9.57	75.03 78.42	5 5	2.23 2.987
2526 2527 2528	37887 37917 37861	7°1 6°3 5°5	19 47 10'95 19 47 40'83 19 48 9'	73.82 77.62	6 3	2.439 2.203 3.670
2529 2530	37957 37945	5·8 7·3	19 48 12 94 19 48 41 90	71.30 76.61	5 4	1.808
2531 2532	38029 38030	6·9 7·3	19 50 7.30 19 50 7.30	80.94	4 3	2·391 2·378
<sup>2</sup> 533 <sup>2</sup> 534 <sup>2</sup> 535	38039 37994 38063	6.0 7.0 7.0	19 50 14.16 19 50 42.79 18.19	76·87 73·03 72·86	4 5 5	2.190 3.518 5.224
2536 2537	38085 38068	6·8 7·0	19 51 19 <sup>.</sup> 67	78·62 76·61	4 5	2°086 2°560
2538 2539 2540	38088 38056 38048	6·5 8·5 7·0	19 51 44.97 19 51 53.83 19 52 9.45	75.01 80.61 69.27	5 1 3	2·373 3·169 3·561
2541 -2542	38084 38047	8.0 7.1	19 52 17.43 19 52 23.64		5 5 6	2·856 3·045
2543 2544 2545	38100 38156 38172	6·8 8·0	19 52 59.58 19 52 59.77 19 53 9.44	73.67 77.62 76.97	3	3·286 2·148 2·150
2546 2547 2548 <b>25</b> 49 2550	38130 38177 38182 38202	6·7 5·8 7·0 6·7 8·8	19 53 16·57 19 53 40·45 19 54 0·33 19 54 3·91 19 54 17·22	76.23	5 5 5	2·844 2·375 2·469 2·162 2·150
2551 2552 2553 2554 2555	38222 38233 38237 38214	7.0 6.4 8.0 8.2 7.5	19 54 52.83 19 55 2.11 19 55 20.37 19 55 23.15 19 55 32.97	72·28 74·81 77·62	4 5 5 4 6	2.510 2.504 2.654 2.480 3.182
2556 2557 2558 2559	38267 38263 38242 38327	6·9 7·5 8·0 6·2	19 56 1.81 19 56 6.37 19 56 13.71 19 56 26.81	75'64 81'64 73'65	6 2 2 2	2·373 2·780 3·262 2·542
2560 2561 2562	38345 38302 38281	7'3 8'3 7'5	19 56 52·20 19 56 59·78	76.60	1 5	2.530 2.983
2563 2564 2565	38350 38370 38380	6·7 6·6	19 57 41.04 19 58 15.30 19 58 28.72	77.24	7 5 6	2.449 2.588 +2.413

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
252I 2522	49° 43′ 1″·9 62 51 29·2	69.93 76.62	6 5	-8"•9 <b>7</b> 8•98	W 1497, RC 4469, Y W 1482. [8546.
2523	93 26 11.5	70.98	5	9.01	T <sub>s</sub> , Bn, L <sub>3</sub> 3483.
2524	65 19 38.1	75.03	5	9.01	W 1501.
2525	85 55 18.4	78.42	5	9.04	W 1167, Si, L, 4714, Gl [4930.
2526	62 3 59.5	73.82	6	9.04	
2527	53 53 19.5	77.62	3	9.08	g 37 .
2528	116 37 45.2	67.12	4	9.13	See Notes.
2529	43 17 39'1	71.30	5	9.15	Oe 19720.
2530	63 43 51.8	76.61	4	9,16	W 1561.
2531	60 8 o·3	74.38	4	9'27	W 1616.
2532	59 38 30.4	80.94	3	9.27	
2533	53 19 58.3	76.87	4	9.58	***
2534	. 97 1 30.0	73.63	5	9.32	W 1247, L, 3507.
2535	66 26 37.2	72.86	5 .	9.36	W 1649.
2536	50 9 28.8	78.62	4	9.36	
2537	66 33 25.5	76.61	5	9.37	W 1652.
2538	59 23 12.6	75.01	5	9.39	W 1671.
2539	94 41 30.2	19.08	I	9.41	W 1272, L <sub>3</sub> 3514.
2540	112 32 54.1	69.27	3	9.43	T 9173, Ar 4213, L, Y [8606.
2541	79 36 27.1	70.44	5	9.44	W1290, Sp 7717, L,1738.
2542	88 40 7.1	70'15	5	9.45	W1286, L, 7192, Gl 4951.
2543	100 16 58.9	73.67	6	9.48	See Notes. [4955.
2544	51 52 28.9	77.62	r	9.48	T 9189, Ar 4228, RC 4519, Gl
2545	51 56 4.2	76.97	3	9.20	Ar 4233, RC 4522, Bn.
2546	79 1 57.0	71.03	5 6	9.21	W1312, Si, L, 1745, Gl
2547	59 21 16.1	69.09		9.54	W 1739. [4956.
2548	62 49 36.6	76.23	5	9.57	W 1749. PM 2392, Y
2549	52 13 56.5	76.83	5	9.57	W 1700, FM 2392, 1   8628.
2550	51 58 24.6	80.22	1	9.29	
2551	64 23 24.6	79.60	4	9.63	W 1776.
2552	64 9 13.0	72.58	5	9.65	W 1778.
2553	70 20 19.4	74.81	5	9.67	W 1789, R 7898, L.
2554	63 12 0.8	77.62	4	9.67	Bn.
2555	95 20 3.9	70.37	5	9.69	R 7893, L 3537.
2556	59 6 48.4	71.65	6	9.72	
2557	63 9 17.6	75.64	2	9.73	W 96 S 6
2558	99 23 8.5	81.64	2	9.74	W 1386, Sp 7760.
2559	65 32 44.4	73.65	2	9.76	W 1822, Y 8659.
2560	38 11 36.8	60.97	5	9.77	Ar 4255, RC 4554.
2561	65 11 32.7	76.60	I	9.79	W - 108 T. 1872
2562	85 37 5.2	71.02	5	9.80	W 1408, L <sub>2</sub> 4873.
2563	61 50 1.0	76.33	7	9.85	W 1873.
2564 2565	67 24 32.8	77'24	5	-0.01 0.80	See Notes.
2505	. 00 20 05	/1.12	U	-991	200 21 0000

No.	Lalande.	Mag.	Mean I	R.A. 1875·0.	Epoch.	Obs.	Ann. Prec.
2566 2567 2568 2569 2570	38392 38371 38374 38418 38411	7.5 7.2 7.0 7.4 8.0	19 19	58 <sup>m</sup> 42 <sup>s</sup> ·11 58 50·77 58 56·86 59 15·05 59 27·93	74.65 80.00 71.16 79.67 81.14	5 5 8 3 2	+2"·412 3.036 3.071 2.379 2.706
2571 2572 2573 2574 2575	38389 38438 38447 38442 38525	7.0 6.0 7.5 8.3 6.2		59 36.88 59 41.86 0 19.90 0 32.97 0 44.33	68·46 75·02 77·68 72·60 68·11	5 5 5 4	3.162 2.352 2.594 2.926 1.795
2576 2577 2578 2579 2580	38454 38480 38458 38506	7°2 7°0 7°7 7°0 6°5	20 20 20 20 20 20	I 11.21 I 21.59 I 26.05 I 37.42 I 48.96	76·42 77·03 72·28 75·97 75·02	5 5 5 3 5	2·806 2·854 3·217 2·749 2·889
2581 2582 2583 2584 2585	38501 38554 38592 38586 38582	8·2 6·0 6·0 8·1 7·5	20 20 20 20 20 20	1 59.38 2 40.58 2 54.18 3 4. 3 25.26	80.61 69.93 73.83 80.64	7 6	3.086 2.862 2.295 2.512 2.861
2586 2587 2588 2589 2590	38612 38670 38672 38664 38691	6.5 7.3 7.6 7.5 6.3	20 20 20 20 20 20	4 4.87 4 42.65 4 53.78 5 17.71 5 33.39	77.29 71.10 74.03 77.03 76.91	6 7 5 5 4	2.910 2.320 2.471 2.905 2.639
2591 2592 2593 2594 2595	38694 38706 38758 38716 38752	7.5 6.0 7.2 8.2 8.0	20 20 20 20 20	5 38·15 5 53·14 6 4·33 6 34· 6 40·07	75.46 68.62 72.45 80.57	5 5 4 3	2·679 2·622 1·988 3·014 2·577
2596 2597 2598 2599 2600	38806 38813 38761 38821 38800	7°1 6°9 9°0 7°0 8°0	20 20 20 20 20	7 33°18 7 39°92 7 44°55 8 18°52 8 37°89	80·90 77·63 68·78 74·63 76·05	4 5 7 5 5	2°187 2°180 3°200 2°571 3°149
2601 2602 2603 2604 2605	38804 38830 38896 38944 38943	7.0 7.0 5.2 7.4 6.2	1	8 45.07 8 52.92 9 58.08 10 27.37 10 32.45	77.17 71.25 68.65 71.00 77.56	6 6 5 3 2	3°190 2°871 2°541 2°214 2°331
2606 2607 2608 2609 2610	38972 38942 38995 39018 39046	7.7 8.0 7.5 7.0 7.3	20 20 20	11 30·39 11 34·07 12 41·28 12 53·76 12 59·03	78·04 73·64 73·46 77·83 80·68	5 5 6 1	2.472 3.173 3.036 2.731 +2.545

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2566 2567 2568 2569 2570	60° 21' 42"·6 88 13 51·5 89 53 57·2 59 6 35·0 72 28 32·3	74.65 80.00 72.10 79.67 81.14	5 5 7 3 2	9"·93 9°94 9°94 9°97 9°98	W 1915, Bn. [Gl 4992. W1453, R 7951, L <sub>1</sub> 7267, W 1456, Bn, L <sub>1</sub> 7269, Bn, Y 8680. [Gl 4994.
2571 2572 2573 2574 2575	94 25 58·2 58 8 4·3 67 33 32·7 82 46 51·3 42 7 31·6	70.95 75.02 77.68 76.15 67.22	3 5 1 2 5	10.00 10.02 10.02 10.03	W 1472, L <sub>9</sub> 3574. W 1957. W 1972, R 7970, L <sub>0</sub> . W 1497, R 7971, Si <sub>1</sub> . Oe 19983.
2576 2577 2578 2579 2580	77 2 4'1 79 18 15'1 97 7 16'8 . 74 17 0'8 80 57 38'2	76·42 77·03 72·28 75·97 75·02	5 5 3 5	10.12 10.13 10.13	W 1514, Gl 5003. L, 1837. R 7990, Sp 7824, L <sub>2</sub> 3591. W 2025, R 8001, L <sub>6</sub> . W1531, R 8004, Si <sub>1</sub> , Gl
2581 2582 2583 2584 2585	90 39 37'2 79 38 12'8 55 56 19'8 64 0 44'0 79 34 40'9	80.61 70.65 73.83 67.01 80.64	5 6 5 4	10.18 10.22 10.26 10.28	W1532, L,7306, Gl 5013. W 9, R 8022, L, 1845, [Gl 5015. Ar 4284. W 32, L, 1852.
2586 2587 2588 2589 2590	81 55 1'9 56 41 6'4 62 5 53'4 81 39 9'2 69 14 10'8	77.29 71.99 74.03 77.03 76.91	6 6 5 5 4	10.33 10.38 10.42 10.44	See Notes. W 123. W 130. [5027, Gl 5030. W 79, R 8072, Si,, L <sub>2</sub> W155, R 8079, Ar4301, [T <sub>2</sub> Gl 5032.
2591 2592 2593 2594 2595	71 0 15'1 68 29 42'0 46 25 37'3 87 4 1'5 66 27 9'8	75.46 67.81 72.45 63.71 80.57	5 5 4 3 3	10.45 10.47 10.48 10.52	W 159, R 8082. W 172, R 8090, Bn. W 207, RC 4619. W113, Ar4305, L <sub>8</sub> 7351, W 212. [Gl 5038.
2596 2597 2598 2599 2600	52 I 5.8 51 55 52.3 96 25 27.6 66 8 20.4 93 52 49.0	80·90 77·63 69·45 74·63 76·05	4 5 6 5 5	10.69 10.61 10.62 10.63	W 258. Bn. W 134, Si <sub>2</sub> , L <sub>2</sub> 3655. W 278, PM 2441. W 166, Si <sub>3</sub> , L <sub>3</sub> 3663, Gl
2601 2602 2603 2604 2605	95 54 58·8 79 54 24·1 64 47 19·0 52 41 9·6 56 38 54·1	77°17 71°87 68°65 71°00 77°56	6 5 5 3 2	10.68 10.69 10.81 10.81	L 3665. L <sub>4</sub> 1901. W 338, T <sub>4</sub> , Gl 5063. W 361, Ar 3331. W 358.
2606 2607 2608 2609 2610	61 51 39.8 95 6 51.2 88 9 19.9 73 1 37.4 64 44 23.4	78·04 73·64 73·46 77·83 80·68	5 5 6 1	10.89 10.89 10.89	W 237, L <sub>3</sub> 3690. See Notes. W 438, R 8181. W 448.

No.	Lalande.	Mag.	Mean	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2611	39060	7.8	20 <sup>h</sup>	13 <sup>m</sup>		75.07	5	+2.326
2612	39023	8.3	20	13	19.29	70.85	5	3.041
2613	39035	3.2	20	13	28.	0.4		3.375
2614	39091	7.2	20	14	3.64	80 62	4	2.451
2615	39078	7.5	20	14	19.49	73'19	2	2.931
2616	39112	7.0	20	14	32.53	76.81	5	2.386
2617	39102	6.5	20	14	40.83	75.04	5	2.723
2618	39117	6.8	20	14	43.67	78.84	5	2.447
2619	39149	6.6	20	14	49.11	68.37	4	1.923
2620	39127	7.0	20	15	13.70	71.87	5	2.626
2621	39108	7.2	20	15	15.67	71.85	5 6	3.047
2622	39135	5.2	20	16	12.70	73'35		3.560
2623	39181	7.4	20	16	25.61	70.66	5	2.428
2624	39134	8.1	20	16	52.08	78.87	4	2.234
2625	39176	5.2	20	16	29.10	75.36	3	2.977
2626	39211	7:3	20	17	15.40	76.92	7	2.236
2627	39196	7°3 7°8	20	17	17.80	77.22	5	2.864
2628	39232	6.5	20	17	35'52	81.00	3	2.413
2629	39251	6·5 6·8	20	17	37.36	70.24	3 6	2.155
2630	39239	6.8	20	18	8.92	79.05	5	2.764
2631	39270	7:3	20	18	50.23	77.60	3	2.762
2632	39294	7.4	20	18	59.47	74.27	5	2.473
2633	39313	6.0	20	19	3.65	70.05	5	2.242
2634	39304	6.2	20	19	43'34	72.12	5	2.886
2635	39329	5.6	20	20	9.01	76.03	5	2.652
2636	39326	6.2	20	20	10.32	80.28	3	2.809
2637	39343	6.2	20	20	40.72	77.31	3	2.740
2638	39337	7.5	20	21	8.06	71.42	5	3.188
2639	39366	7.5	20	2 I	39.61	73.16		3.560
2640	39408	7.5	20	21	52,51	79.85	5	2.444
2641	39426	6.7	20	22	14.82	67.90	5	2.341
2642	39432	7.2	20	22	42.04	73.89	5	2.639
2643	39464	7.3	20	22	55.36	71.29	5	2.070
2644	39428	8.3	20	22	57.69	78.43	5	2.882
2645	39459	7.2	20	23	9.13	76.63	5	2.355
2646	39496	7.4	20	23	50.49	72.03	5	2.108
2647	39462	6.8	20	23	54.83	80.61	I	2.884
2648	39502	4.5	20	24	17.02	77.15	8	2.450
2649	39506	7.0	20	24	36.77	69.06	5	2.700
2650	39509	8.0	20	25	19.03	80.22	İ	3.186
2651	39558	7.7	20	25	38.92	76.62	5 6	2.241
2652	39591	6.2	20	25	21.22	71.10		1.978
2653	39540	8.3	20	25	58-21	74.41	4	3.038
2654	39570	6.2	20	26	0.20	78.65	5	2.649
2655	39542	7.5	20	26	0.26	80.65	2	+3.040
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No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	· Authorities.
2611	56° 17′ 53″ 1	75.07	5	- I Ioo	W 461, Bn.
2612	88 23 48.9	70.88	4	11.03	W 292, Sp7958, L, 7439.
2613	105 10 27.5	67.60	4	11.02	See Notes.
2614	60 53 30.5	80.62	4	11.07	W 488. [5086.
2615	82 46 39.7	80.63	I I	11.00	W 327, Si, L, 5157, Gl
2023	02 40 39 7	0003	•	11.09	" 32/3 ~ 13 - 28 3 - 3/3 · ···
2616	58 20 39.2	76.81	3	11.11	W 504.
2617	72 35 56.4	75.04	5	11.13	R 8206, L.
2618	60 39 56.4	78.84	5	11.13	W 508.
2619	44 4 7.5	66.10	5	11.13	Oe 20366, RC 4725.
2620	68 7 2.0	71.87	5	11.16	W 517, L.
2621	88 43 28.0	71.85	5	11.16	W 345, Si, Bn, L, 7466.
2622	100 3 8.7	74.90	5	11.53	L. 3198.
2623	59 48 28.0	70.66	5	11.52	W 571.
2624	64 3 34.6	80.58	2	11.58	W 571. W 586.
2625	85 3 18.4	75.36	3	11.50	W 392, R 8232, Si, T2,
-6-6	6. 6		_		[Y 8842, Gl 5101.
2626	64 6 2'1	76.92	7	11.30	W 600.
2627	79 18 52.2	77.22	5	11.30	L, 1984.
2628	59 7 3'2	81.00	3 7	11.33	TO CO
2629	49 15 59.2	69.26		11.33	RC 4744
2630	74 21 18.2	79.02	5	11.37	R 8255, L <sub>6</sub> .
2631	74 15 34.2	77.60	3	11'42	I.6.
2632	61 24 8.3	74.27	5	11.43	
2633	52 55 34.3	70'14	5	11.44	W 665. [Gl 5119.
2634	80 20 55.7	72.12	5	11.48	W465,L, 2016, 9yr 1897,
2635	68 59 47.5	76.03	5.	11.21	R 8285, L6.
2636	76 29 40.0	80.28	3	11.21	W 473, R 8282, L, 2022,
2637	73 5 33.0	77.31	3	11.22	W 706. Gl 5121.
2638	96 3 52.9	71.42	5	11.28	L <sub>3</sub> 3793.
2639	99 46 57.1	74.68	5	11.62	W 507, Si2, Sp 8056, L
2640	60 2 26.2	79.85	5	11.64	W 747. [3244.
26.17	#6 . #a.9	66.56	1	66	
2641	56 4 53.8	66.06	5	11.66	W 757.
2642	1	73.89	5 5	11.69	$\mathbf{L}_{6}$ .
2643	47 15 51.7 80 4 55.2	71.29	5	11.41	R 8321, L, 2055.
2644 2645	80 4 55.2	78·43 76·63	5 5	11.41	W 786.
		,	1		
2646	51 5 9.6 80 6 47.3	72.03	5	11.48	-
2647	1	80.61	1	11.78	L. 2063.
2648	60 2 52.0	77.36	7	11.81	See Notes.
2649	70 59 45.9	69.89	4	11.83	W 823, R 8359.
2650	96 1 26.6	80.22	I.	11.88	W 597, R 8366, L, 3835, [Gl 5151.
2651	63 43 59.6	76.62	5	11.90	W 856.
2652	44 29 43.5	71.90	5	11.92	See Notes. [5156.
2653	88 12 6.3	74.67	5	11.92	W 620, Si, L, 7618, Gl
2654	68 31 33.0	78.65	5	11.93	W 868, L <sub>6</sub> .
2655	88 17 20.1	80.65	2	-11.93	W 622, L, 7619, Gl 5157.
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No.	Lalande.	Mag.	Mean R.A	. 1875.0.	Epoch.	Obs.	Ann. Prec.
2656	39593	6.2		n 148.25	74.20	5	+ 2*.277
2657		8.2		23.			1.853
2658	39595	6.0	20 26	37.22	68.02	5	2.263
2659	39612	7.0	20 26	42'14	79.87	5	2.321
2660	39599	8.4	20 26	43.28	71.64	5	2.24
2661	39644	7.1	20 27	34.33	73.08	5 6	2.232
2662	39637	7.5	20 27	52.36	75.2	1	2.891
2663	39639	8.0	20 28	7.77	80.61	I	3.093
2664	39672	7.5	20 28	12.81	76.43	5	2.478
2665	39692	7.5	20 28	30.82	70.86	5	2.393
2666	39681	6.2	20 28	35.69	78.63	5	2.673
2667	39724	7.2	20 29	8.14	70.63	5	2.348
2668	39699	7.2	20 29	20.94	73.89	5	2.951
2669	39690	7.6	20 29	22.10	71.19		3.080
2670	39676	7.0	20 29	22.78	80.64	2	3.314
2671	39740	6.7	20 29	43'35	77:03	5	2.407
2672	39763	7.0	20 30	30.77	78.44	5	2.761
2673	39813	6.4	20 30	20.21	73.23	5	2.138
2674	39760	6.6	20 30	53.74	69.95		3.078
2675	39756	7.0	20 31	5.41	81.67	I	3.584
2676	39790	7.6	20 31	23.97	77.47	5	2.960
2677	39788	8.0	20 31	33.82	71.69	7	3.191
2678	39798	8.2	20 31	46.17	80.93	3 6	3:164
2679	39827	7.0	20 32	30.03	74.47		3.141
2680	39885	6.0	20 32	41.36	71.01	6	2.254
2681	39855	5.2	20 32	49.96	69.64	5	2.832
2682	39833	2.0	20 32	55.			3.426
2683	39905	6.0	20 33	37.37	71.59	5	2.662
2684	39934	7.0	20 33	56.68	76.24	5	2.248
2685	39923	7.3	20 33	29.12	73.70	4	2.270
2686	39897	7.5	20 34	0.32	78.84	5	3.017
2687	39948	7.5	20 34	28.72	80.65	2	2.460
2688	39944	7:5	20 34	51.			2.809
2689	39967	7.2	20 35	1.74	73.90	5	2'343
2690	39956	6.2	20 35	6.15	77.85	5	2.703
2691	39939	7'0	20 35	33.13	80.61	1	3.421
2692	37737	8.0	20 35	35.			1.472
2693	40001	7'3	20 36	14.67	77.69	4	2.616
2694	40064	7.9	20 38	1.61	80.67	2	2.588
2695	40083	6.4	20 38	30.60	74'10	5	2.347
2696	40081	6.1	20 38	57.20	78.46	5	2.856
2697	40103	7.4	20 39	9.82	73.47	5	2.241
2698	40073	8.0	20 39	28:48	81.72	I	3.444
2699	40088	7.0	20 39	35.80	76.65	5	3.082
2700	40097	7.2	20 39	48.33	70.86	5	+ 2.948
			1				

No.	Mean N.P.D. 1875.0	Epoch.	Obs.	Ann. Prec.	Authorities.
2656 2657 2658 2659 2660	53° 29′ 4″·8 41 22 17·2 64 36 59·7 56 5 22·8 65 4 14·3	74.50 66.37 68.86 79.87 71.64	5 3 5 5 5	- 11"·94 11·96 11·98 11·98	W882,Ar4406,9yr1910. Ar 4409, Oe 20647. R 8394. W 900. W 892.
2661 2662 2663 2664 2665	63 12 44'1 80 21 58'9 91 6 7'3 60 54 2'4 57 31 5'5	73.08 77.67 80.61 76.43 70.86	5 5 1 5 5	12.08 13.08 15.09	W 920, R 8409. L, 2113. W 683, Si <sub>2</sub> , Si <sub>3</sub> 1206, L, [7648 Gl 5167] W 957, R 8433.
2666 2667 2668 2669 2670	69 26 30.5 55 44 54.2 83 28 58.9 90 25 49.6 102 48 44.9	78.63 70.63 73.89 72.31 80.62	5 5 5 5 2	12.19 13.19 13.12 13.12	W 949, R 8432.  L, 5383. [Gl 5171. W715, Si, 1207, L, 7667, W711, R 8437, Si, 1872, [Sp 8153, L, 3301.
2671 2672 2673 2674 2675	57 55 24'4 73 37 3'4 48 32 30'2 90 20 10'6 101 27 59'6	77.03 78.44 75.23 69.95 81.67	5 5 6 1	12.19 12.24 12.24 12.27 12.28	R 8467, L <sub>6</sub> . T <sub>3</sub> . [5179 W 754, Si, L <sub>1</sub> 7687, Gl W 755, R 8471, Si <sub>8</sub> 2299, [L <sub>6</sub> 3317, Y8952.
2676 2677 2678 2679 2680	83 56 1.7 94 49 1.2 94 56 52.2 95 22 2.7 52 6 19.8	77.47 72.62 77.59 76.24 71.01	5 6 4 5 6	12.39 13.33 13.33 13.35	W 773, Si, L <sub>2</sub> 5470, Gl 5186. W772, Si <sub>2</sub> , L <sub>2</sub> 3887, Gl 5187. W780, Sp 8177, L <sub>2</sub> 3890. W 799, Si <sub>2</sub> , L <sub>3</sub> 3900. [N7yr 2329, Gl 5194.
2681 2682 2683 2684 2685	77 7 21.0 108 34 35.6 68 37 19.5 51 47 48.9 64 22 5.8	69.64 67.59 71.29 76.24 73.72	5 2 5 5 5	12:40 12:41 12:48 12:48	W815, T 9529, 7yr 1702, See Note. W 1116. W 1140, Note. W 1135.
2686 2687 2688 2689 2690	87 0 0.0 59 37 30.1 75 54 57.2 55 3 7.9 70 31 3.9	78·84 80·65 58·67 73·90 77·85	5 2 2 5 5	12·48 12·52 12·54 12·55 12·56	W 843, Si,, Sp 8207, L <sub>i</sub> W 1154. [7719. Ar 4449, L <sub>i</sub> 2186. W 1172. W 1164, L <sub>6</sub> .
2691 2692 2693 2694 2695	108 33 18·7 33 1 33·1 66 15 44·5 64 50 49·2 54 51 41·8	80.61 67.65 74.28 74.00 74.10	1 2 5 3 5	12.59 12.64 12.76 12.79	T 9550, Ar 4451, L <sub>6</sub> , Oe 20909, Ar 4456. W 1198.
2696 2697 2698 2699 2700	78 8 24.0 50 59 26.9 109 53 33.6 90 47 39.4 83 4 31.9	78·46 73·47 81·72 76·65 70·86	5 5 5 5	12.82 12.83 12.85 12.86 -12.88	PM 2515. W 1301. Oe 20839, L <sub>e</sub> , Y9046. W 991, Si <sub>2</sub> , L <sub>1</sub> 7786. L <sub>2</sub> 5538.

No.	Lalande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
2701 2702 2703 2704 2705	40125 40172 40160 40164 40170	7·1 7·2 7·3 6·8 7·5	20 <sup>h</sup> 41 <sup>m</sup> 19 <sup>*</sup> ·83 20 41 42 <sup>*</sup> 34 20 41 43 <sup>*</sup> 82 20 42 7 <sup>*</sup> 83 20 42 13 <sup>*</sup> 16	77.32 69.05 72.52 77.35 75.31	3 5 5 5	+3°.417 2.437 2.893 3.016 2.945
2706 2707 2708 2709 2710	40193 40182 40212 40184 40249	7.0 6.8 7.7 8.0 6.7	20 42 32.87 20 42 51.51 20 43 0.45 20 43 9.32 20 43 17.00	68·73 71·00 72·96 76·67 73·20	5 5 5 5 5	2·552 3·090 2·652 3·200 2·258
2711 2712 2713 2714 2715	40229 40234 40280 40277 40328	6·4 7·2 7·7 7·5 6·0	20 43 46·11 20 43 46·86 20 44 16·01 20 44 16·18 20 44 56·29	80.64 77.50 78.96 72.92 73.72	4 6 3 4 2	2.982 2.875 2.273 2.364 1.811
2716 2717 2718 2719 2720	40316 40334 40311	7.0 6.8 8.4 7.0 7.5	20 45 50°22 20 45 56°59 20 46 0°95 20 46 25°67 20 46 40°49	71.09 70.06 75.69 81.72 80.54	5 5 1 1	2°926 2°389 2°394 3°420 3°533
2721 2722 2723 2724 2725	40369 40367 40373 40352 40381	8·0 6·7 7·5 7·5 <b>7</b> ·0	20 46 44'13 20 46 54'97 20 47 3'79 20 47 11'76 20 47 26'11	74.69 70.30 72.96 76.31 79.46	5 5 5 4	2·266 2·439 2·395 3·028 2·619
2726 2727 2728 2729 2730	40354 40393 40403 40405 40450	7.5 8.0 6.6 6.7 7.3	20 47 30°02 20 47 40°27 20 47 52°51 20 48 40°51 20 49 45°55	71.02 77.67 73.11 73.85 70.67	6 5 4 6 3	3°160 2°524 2°517 3°104 3°142
2731 2732 2733 2734 2735	40506 40484 40515 40518 40492	7'2 7'7 8'0 7'2 7'2	20 50 17'12 20 50 26'38 20 50 34'82 20 50 40'69 20 50 41'05	75.68 65.66 72.93 67.31 76.78	5 5 5 2	2·452 3·052 2·544 2·569 2·250
2736 2737 2738 2739 2740	40538 40590 40577 40522 40572	7.7 6.7 6.5 7.0	20 50 49.82 20 51 32.33 20 51 45.96 20 51 46.43 20 52 12.56	78.03 73.51 76.67 80.68 81.69	3 5 5 1 2	2°292 2°130 2°178 3°334 2°597
2741 2742 2743 2744 2745	40604 40588 40600 40601	7.8 6.5 5.1 8.0 7.0	20 52 12.65 20 52 13.56 20 52 41.09 20 52 41.48 20 52 44.99	71.67 77.24 70.80 80.67 79.86	4 5 4 1 6	2°179 2°392 2°681 2°650 +2°667

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Anthorities.
2701 2702 2703 2704 2705	108° 39′ 38″ 3 58 2 12°1 79 59 31°4 86 48 39°5 82 51 53°9	75.64 67.86 72.52 77.35 75.31	4 5 5 5 5	-12":98 13:00 13:03 13:04	PM 2519,0e 20861,L <sub>et</sub> Y W1355. [9062,9yr1942. W 1049, L <sub>4</sub> 2255. See <i>Notes</i> . W 1060, Si <sub>1</sub> . Gl 5253.
2706 2707 2708 2709 2710	62 51 49.0 91 1 26.2 67 26 56.2 97 9 36.4 51 10 21.3	69.71 71.30 72.96 76.67 73.20	4 5 5 5 5	13.11 13.10 13.09 13.08	W 1376, Bn. [5258. W 1069, Si <sub>2</sub> , L <sub>1</sub> 7832, Gl W 1075, Si <sub>2</sub> , L <sub>2</sub> 3990. W 1407, R8570, Y 9092.
2711 2712 2713 2714 2715	84 55 6.8 78 58 5.1 51 35 51.9 54 53 53.4 38 33 9.4	80.64 77.50 78.96 72.92 73.72	4 6 3 4 2	13.14 13.14 13.17 13.17	L <sub>2</sub> 5591. W 1101, Gl 5268. W 1439. Y 9108. Oe 21161.
2716 2717 2718 2719 2720	81 41 42·1 55 42 46·3 55 58 27·4 109 35 2·2 114 45 3·6	71.09 70.06 75.69 81.72 80.54	5 5 1 1	13.28 13.29 13.31	$\begin{array}{c} L_{2}5612.\\ W1470.\\ W1474.\\ Oe20928,L_{6}.[St11116.\\ Oe20933,L_{e},Y9122,\\ \end{array}$
2721 2722 2723 2724 2725	51 4 31.8 57 37 10.9 55 48 40.8 87 28 9.0 65 33 20.6	74.69 70.30 72.96 76.31 79.46	5 5 5 4	13.34 13.35 13.36 13.37 13.38	W 1493. W 1494. W1182,Sp 8355,Gl5251. W 1505.
2726 2727 2728 2729 2730	95 0 53.5 61 8 21.4 60 49 11.3 91 50 54.3 94 2 20.9	71'49 77'67 73'11 75'50 70'67	5 5 4 5 3	13.39 13.40 13.41 13.46	W 1187, T 9657, Si <sub>3</sub> , Sp W 1509. [8358, L <sub>3</sub> 4030. W 1518. See <i>Notes</i> . W 1240, Sp 8384, L <sub>3</sub> [4053, Gl 5205.
2731 2732 2733 2734 2735	57 47 14.5 88 45 20.5 61 46 37.5 62 54 9.2 50 10 37.0	75.68 67.57 72.93 66.30 76.78	5 5 5	13.57 13.58 13.58 13.59	W 1583. See <i>Notes</i> . W 1596.
2736 2737 2738 2739 2740	51 34 29.7 46 6 18.9 47 42 35.9 104 57 51.2 64 4 45.1	78.03 73.51 76.67 80.68 81.69	3 5 5 1 2	13.66 13.66 13.66	Bn, B 456. W 1630. W 1293, Si <sub>4</sub> 1919, L <sub>6</sub> . W 1631.
2741 2742 2743 2744 2745	47 35 33.5 55 10 9.6 68 9 22.3 66 35 13.8 67 26 10.5	71.66 77.24 70.49 80.67 79.86	3 5 6 1 6	13.69 13.72 13.72 -13.72	See <i>Notes</i> . W 1636. [2366, Gl5307. T 9703, Ar 4527, N 7yr W 1644.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2746 2747 2748 2749 2750	40626 40649 40657 40706 40671	6·7 6·5 6·2 7·0 7·3	20 <sup>h</sup> 53 <sup>m</sup> 20 53 20 54 20 54 20 54	05.63 54.63 1.97 26.17 28.66	73.12 73.51 77.92 70.71 76.34	5 5 5 5 3	+ 2 <sup>5</sup> ·512 2·952 2·788 2·151 2·730
2751 2752 2753 2754 2755	40720 40705 40735 40688 40764	5.5 7.0 7.3 7.0 6.2	20 54 20 54 20 55 20 55 20 56	29.65 49.88 5.51 35.01 14.44	70.08 74.83 70.53 80.39 70.85	5 5 4 6	1.920 2.468 2.148 3.294 2.386
2756 2757 2758 2759 2760	40758 40754 40739 40755 40788	7.6 7.9 7.2 7.1	20 56 20 56 20 56 20 56 20 57	20.03 22.07 24.68 39.91 15.32	77'45 79'53 68'50 73'49 74'09	5 4 6 5 5	2.570 2.661 3.024 2.883 2.605
2761 2762 2763 2764 2765	40805 40799 40806 40827 40818	7.0 7.7 7.0 8.2 7.8	20 57 20 57 20 58 20 58 20 58	17'03 29'31 24'49 43'11 43'71	69.70 77.10 73.37 77.14 80.68	7 6 6 5	2°158 2°568 3°043 2°933 3°038
2766 2767 2768 2769 2770	40826 40828 40873 40938 40869	8·o 6·2 7·o 7·6 7·	20 58 20 59 20 59 20 59 21 0	58·44 14·97 55·05 55:54 8·48	69.19 79.33 69.50 74.62 76.40	6 5 5 1 5	3.153 2.981 2.822 2.413 3.082
2771 2772 2773 2774 2775		7.5 7.3 6.5 7.7 7.0	2I 0 2I 0 2I I 2I 2 2I 2	15.17 55.57 41.00 30.11 51.54	80.61 71.45 78.94 70.87 75.90	1 4 4 5 5	3'347 3'093 2'818 3'051 2'956
2776 2777 2778 2779 2780	41030 41064 41044	7.7 7.9 7.8 6.6 7.8	2I 3 2I 3 2I 3 2I 4 2I 4	- 0	78·27 72·73 71·70 76·11 69·65	4 5 5 5 2	2.074 2.343 2.197 2.758 2.196
2781 2782 2783 2784 2785	41091 41143 41146	7.7 7.3 6.8 7.8 6.5	21 4 21 4 21 5 21 5 21 6	47°17 29°19 45°33	80.61 74.31 69.50 75.67 71.91	5 6 5 6	2.080 2.745 2.150 2.340 2.409
2786 2787 2788 2789 2790	41156 41230 41239	7.0 7.7 7.5 6.8 8.0	21 6 21 6 21 7 21 7 21 7 21 8	44.26 34.34 49.75	75.88	5 5 1 5	2·540 2·957 2·354 2·426 + 3·176

No.	Mean N. P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2746 2747 2748 2749 2750	60° 5′ 15″·1 82 58 12·4 73 39 40°0 46 25 30°0 70 31 34·5	73.12 73.51 77.92 67.50 74.15	5 5 5 6 4	-13".74 13.80 13.81 13.84 13.84	W 1655. R 8750, L <sub>2</sub> 5708, Y <sub>9</sub> 184. R 8751, L <sub>e</sub> . RC 5052. W 1683, R 8757, L <sub>e</sub> .
2751 2752 2753 2754 2755	40 I 22.6 57 59 24.6 46 I5 34.7 102 56 10.5 54 27 46.8	70.08 74.83 71.97 80.39 71.29	5 5 4 4 5	13.84 13.86 13.87 13.90	See Notes. W 1695. W 1394, Si <sub>4</sub> 1926, L <sub>5</sub> W 1731.
2756 2757 2758 2759 2760	62 23 15'9 66 49 27'1 87 8 24'7 78 50 4'5 63 59 2'1	77.45 79.53 70.15 73.49 74.09	5 4 4 5 5	13.95 13.95 13.95 13.97 14.01	R 8802. [5323. W 1414, Si., L <sub>1</sub> 7998, Gl W 1428, Sp 8460, L <sub>4</sub> 2415, W 1756, Bn. [Gl 5326.
2761 2762 2763 2764 2765	46 18 5.0 62 10 10.1 88 13 24.1 81 39 18.8 87 56 56.5	71'21 77'10 73'48 77'14 80'68	6 6 5 5	14.02 14.08 14.10 14.10	R 8835. W 1764. L <sub>1</sub> 8024. L <sub>2</sub> 5753. W 1471, L <sub>1</sub> 8032.
2766 2767 2768 2769 2770	94 51 31.4 84 32 5.7 75 10 4.5 55 4 7.0 90 36 16.9	70.07 79.40 67.34 74.59 76.40	5 6 6 2 5	14.12 14.13 14.14 14.14	W 1475, Si, Sp 8484. 12yr 1883, RC, 2054, L, L, 2449. [5761. W 1829. W 1503, Si, Bn, L, 8046, [Gl 5345.
2771 2772 2773 2774 2775	106 14 32.9 91 16 0.6 74 50 29.3 88 42 59.6 82 54 57.8	80·61 71·45 78·94 70·87 75·90	1 4 4 5 5	14.30 14.33 14.39	See Notes. W 1526, L, 8055. W 1553, R 8894, L <sub>6</sub> . W 1570, L, 8076, Gl 5364. L <sub>8</sub> 5799.
2776 2777 2778 2779 2780	43 13 32 <sup>2</sup> 51 58 32 <sup>3</sup> 46 45 32 <sup>3</sup> 71 17 58 <sup>3</sup> 46 40 42 <sup>6</sup>	78·27 72·73 70·65 76·11 65·50	4 5 6 5 5	14.37 14.38 14.41 14.42	Oe 21687. RC <sub>2</sub> 2063. W 38. W 51, Ar 4581.
2781 2782 2783 2784 2785	43 14 52'9 70 32 54'0 45 0 21'3 51 32 52'8 54 12 38'3	80.61 74.31 70.06 75.67 71.91	5 5 5 6	14.43 14.47 14.52 14.53	Oe 21723. W 62, R 8956. R 8972. W 92.
2786 2787 2788 2789 2790	59 53 36·2 82 49 8·5 51 56 47·1 54 42 56·3 96 31 33·5	66·28 78·08 77·67 75·88 78·67	5 5 1 5 1	14.58 14.59 14.64 14.66 - 14.71	W 116, R 8992, Ar 4586. W 96, L <sub>2</sub> 5835, Gl 5385. Y 9273. W 154, Y 9275. W 147, L <sub>2</sub> 4191.

No.	Lalande.	Mag.	Mean	R.A.	1875-0.	Epoch,	Obs.	Ann. Prec.
2791	41269	7.0	2 I h	8 <sup>m</sup>	49**73	68.88	5	+2**561
2792	41259	6.8	2 I	8	54.34	71.34	5	2.812
2793	41290	7.2	21	9	50.54	78.28	5	2.897
2794	41299	6.2	2 I	9	51,49	75.27	5	2.809
2795	41347	7.1	21	10	1.97	71.99	4	1.908
2796	41312	7.2	21	10	7.07	73.49	4	2.758
2797	41293	7.5	21	10	11.24	71.94	5	3.100
2798	41287	7.0	21	10	13.86	81.67	I	3.242
2799	41291	7.0	21	10	22.72	74.66	5	3.294
2800	41326	6.4	21	10	25.76	70.91	5	2.653
2801	41338	7.5	2 I	10	57.48	77.25	5	2.857
2802		8.3	21	II	9.86	78.80	2	2.896
2803	41380	6.3	21	ΙΙ	15.01	69.50	6	2.094
2804	41344	8.0	2 I	11	16.58	79.36	5	2.951
2805	41376	7.0	21	11	35.89	69.53	5	2.426
2806	41386	7.0	21	12	32.27	77'18	2	2.808
2807	41420	6.2	21	13	5.13	71.28	5	2.673
2808	41439	8.3	21	13	29.16	75.47	4	2.647
2809	41428	7.0	21	13	32.77	76.59	5	2.932
2810	41448	7.3	21	14	4.33	70.33	5	2.877
2811	41493	7:3	21	14	22.38	79.93	5	2'374
2812	41476	6.0	21	14	33.54	71.86	5 6	2.724
2813	41486	8.2	21	15	4.10	81.75	I	3.037
2814	41557	7.8	21	16	4.13	71.75	ı	2.315
2815	41554	6.0	21	16	6.00	77.88	2	2.252
2816	41533	7.2	21	16	16.29	81.12	2	3.032
2817	41569	7.8	2 I	17	12.81	78.74	5	2.935
2818	41588	6.2	2 I	17	19:36	69.10	5	2.23
2819	41585	7.2	21	17	37.49	76.71	5	2.863
2820	41610	7.7	21	17	45.23	71.92	5	2.288
2821	41624	7.0	2 I	17	47.55	71.12	5	2.301
2822	41619	8.0	2 I	17	54.68	74.45	5	2.282
2823	41627	7.5	21	17	55'17	72.80	4	2.389
2824	41650	7.0	21		8.82	73.04	3	2.075
2825	41615	6.2	21	18	18.45	77'11	5	+2.925
2826	41852	6.3	21	18	27.25	64.76	I	-2.550
2827	41637	6.2	2 I	18	32.86	80.36	3	+2.672
2828	41601	7.0	2 I	18	32.97	80.69	3	3,305
2829	41648	6.5	2 I	18	46.65	81.75	1	2.686
2830	41674	7.0	21	19	14.64	69.99	4	2.663
2831	41655	6.3	21	19	27.50	65.65	r	3.072
2832	41684	7.0	2 I	19	29.77	73.36	5	2.635
2833	41686	7.9	2 I	19	39.65	80.61	1	2.690
2834	41697	7.3	21	19	54.75	78.36	5	2.297
2835	41700	8.2	21	20	26.79	74.54	2	+2.999

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2791 2792 2793 2794 2795	60° 36′ 54″·1 74 2 15·6 79 2 22·1 73 47 18·5 37 48 17·7	68.06 71.34 78.58 75.27 68.50	5 5 5 5	- 14''·72 14·72 14·77 14·77	Y 9281. Bu. R 9061, L <sub>6</sub> .
2796 2797 2798 2799 2800	70 48 18·4 92 7 39·4 100 39 19·8 103 47 59·3 65 5 4·4	73·36 71·94 81·67 74·66 70·91	5 5 5 5	14.79 14.80 14.81 14.81	$\begin{array}{lll} W \ 207, \ R \ 9068, \ L_{b} \\ W \ 187, \ Si_{s} \ 1216, \ L_{1}8176. \\ See \ \textit{Notes.} & [L_{b} \ 3576. \\ W \ 188, \ R \ 9065, \ Si_{4} \ 1960, \\ W \ 212, \ R \ 9074. \end{array}$
2801 2802 2803 2804 2805	76 34 7'1 78 57 43'8 42 32 45'7 82 17 16'2 54 11 57'9	77.25 78.80 68.90 79.36 69.35	5 6 5 5	14.84 14.85 14.86 14.86	W 211, Gl 5408. W 215, Sp 8601, L <sub>4</sub> 2543. Oe 21933. L <sub>2</sub> 5887.
2806 2807 2808 2809 2810	78 57 14.9 65 51 55.1 64 26 6.1 81 0 5.2 77 33 54.4	74'47 71'28 75'47 76'59 71'32	4 5 4 5 5	14.93 14.99 14.99 15.02	See Notes. W 284. [Ls 5902, Gl 5420. W271,PM2583,R,Sil,Sp8621, W 293, Gl 5423.
2811 2812 2813 2814 2815	51 43 13.7 68 30 8.2 87 38 32.7 49 5 15.7 57 55 2.5	79.93 73.10 81.75 71.75 71.75	5 5 1 1 3	15.04 15.05 15.14 15.14	W 322, Y 9318. W 319. W 315, Gl 5430. W 366. W 360.
2816 2817 2818 2819 2820	87 36 50.9 81 4 47.5 60 13 26.8 76 29 3.8 60 53 21.5	81·15 78·74 69·28 76·71 71·93	2 5 5 5 5	15.53 15.53 15.15	W 347, Si <sub>1</sub> , L <sub>1</sub> 8253, Gl L <sub>2</sub> 5938. W 395. W 404.
2821 2822 2823 2824 2825	51 53 54'9 60 43 17'1 51 49 34'0 41 2 30'4 80 21 44'3	71·15 74·45 72·82 69·95 77·11	5 5 5 4 5	15°24 15°24 15°25 15°27	Y 9350. W 410. Y 9353. Oe 22146, RC 5211. W 396, Si,, L, 2620.
2826 2827 2828 2829 2830	9 17 43.6 65 13 26.7 104 48 52.8 66 0 26.9 64 39 24.6	64.76 80.36 77.35 81.75 68.12	3 5 1	15.32 15.32 15.32 15.32	RC 5228. [1979, L <sub>6</sub> 3625. W 392, Oe 21375, Si <sub>4</sub> [8295, Gl 5458.
2831 2832 2833 2834 2835	90 0 17·8 63 7 10·3 66 2 49·1 61 4 36·2 85 5 24·8	64·76 73·36 80·61 78·36 73·74	5 1 5 1	15.33 15.34 15.36 - 15.39	W 420, Bn, Sp 8674, L, W 454. W 459. See Notes.

No.	Lalande.	Mag.	Mean R.	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
2836 2837 2838 2839 2840	41710 41712 41723 41734 41779	6·7 7·3 7·0 6·5 7·5	2 I h 2 c 2 I 2 c 2 I 2 c 2 I 2 c 2 I 2 c	1 2.25	70 36 76.71 74.55 71.54 72.85	5 5 6 5	+2*·779 2·919 2·999 2·834 1·968
2841 2842 2843 2844 2845	41761 41759 41767 41756 41808	8.0 7.0 5.4 6.5 5.8	2I 22 2I 22 2I 22 2I 22 2I 22	2 4.84 2 9.51 2 15.06	74°09 76'73 71'35 79'18 72'76	5 5 5 3 1	2·633 2·743 2·638 2·958 1·973
2846 2847 2848 2849 2850	41787 41814 41799 41820 41835	5.8 6.5 5.5 6.8 7.5	2I 23 2I 23 2I 23 2I 23 2I 24	3 7.79 3 17.09 3 47.32	78.55 60.30 73.43 80.63 67.20	4 7 4 2 2	2.549 2.670 2.737 2.623 3.224
2851 2852 2853 2854 2855	41897 41869 41870 41913 41957	6·7 6·0 6·5 7·3 6·7	2I 22 2I 25 2I 25 2I 25 2I 25	6·92 34·92 43·54	64.93 73.45 71.73 72.98 69.42	1 4 4 4 6	2·209 2·901 3·261 2·434 2·768
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2871 70 46 30°2 77°00 3 15°97 W 737, R 9300, L <sub>0</sub> . 2872 45 11 3'3 73°13 5 15°98 W 757, Oe 22524. 2873 84 47 27°9 71°22 4 16°03 See Notes. 2874 101 8 20°1 74°17 5 16°05 W 749, Si <sub>2</sub> 2434, L <sub>6</sub> 371 2875 65 3 52°1 71°78 5 16°07  2876 70 17 52°0 70°53 5 16°08 Ar 4714, R 9336, L <sub>c</sub> . 2877 47 16 21°3 72°15 5 16°10 W 816.						
2872 45 11 3'3 73'13 5 15'98 W 757, Oe 22524. See Notes. W 749, Si <sub>2</sub> 2434, L <sub>6</sub> 371 2875 65 3 52'1 71'78 5 16'05 2876 70 17 52'0 70'53 5 16'05 2877 47 16 21'3 72'15 5 16'10 W 816.	1 1	90 30 39 3	.74 10	5	13 97	[4/20, 0133,44
2872 45 11 3'3 73'13 5 15'98 W 757, Oe 22524. See Notes. W 749, Si <sub>2</sub> 2434, L <sub>6</sub> 371 2875 65 3 52'1 71'78 5 16'05 2876 70 17 52'0 70'53 5 16'05 2877 47 16 21'3 72'15 5 16'10 W 816.	2871	70 46 30.2	77.00	3	15.97	
2873 84 47 27 9 71 22 4 16 03 See Notes. W749, Si <sub>2</sub> 2434, L <sub>5</sub> 371 2875 65 3 52 1 71 78 5 16 07 2876 70 17 52 0 70 53 5 16 08 Ar 4714, R 9336, L <sub>e</sub> . 2877 47 16 21 3 72 15 5 16 10 W 816.	2872			5		W 757, Oe 22524.
2874 101 8 201 74'17 5 16'05 W749, Si <sub>2</sub> 2434, L <sub>3</sub> 371 2875 65 3 52'1 71'78 5 16'07 W749, Si <sub>2</sub> 2434, L <sub>3</sub> 371 2876 70 17 52'0 70'53 5 16'08 Ar 47'14, R 9336, L <sub>e</sub> . 2877 47 16 21'3 72'15 5 16'10 W 816.	2873			4		
2875 65 3 52'1 71'78 5 16'07 2876 70 17 52'0 70'53 5 16'08 Ar 4714, R 9336, L <sub>0</sub> . 2877 47 16 21'3 72'15 5 16'10 W 816.	2874		74'17		16.02	W 749, Si3 2434, L5 3711.
2877 47 16 21'3 72'15 5 16'10 W 816.	2875	65 3 52'1		5		
2877 47 16 21'3 72'15 5 16'10 W 816.	0846	70 17 10:	20:22	_	16.00	Ar 4714. R 0326. L.
	2070			5		
	2077			5		
2070 0 4 119 7312 5 1010 119 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2878	66 4 11.9	73'12	5 5		
2879 81 22 48.7 68.88 5 16.11 W789, Si, Sp 8792, Le 6086,	2879			5		W789, Si, Sp 8792, L2 6086, G1
2880 79 57 12.9 78.71 5 -16.14 W 808, Si, Li 2746, Gl 5542	2880	79 57 12.9	78.71	5	-10.14	W 808, Si, L. 2746, G15542.

No.	Lalande.	Mag.	Mean R.	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
2881	42258	8.2	21h 3	5 <sup>m</sup> 8*·67	75.88	5	+2**918
2882	42273	7.1	21 3		72.23	5	2.649
2883	42286	7.1	21 3	•	77.78	4	2.684
2884	42292	6.7	21 3		80.70	3	2.764
2885	42345	8.0	21 3		72.79	I	2.869
2886	42315	6.6	21 3	5 45°5 <b>5</b>	78.90	I	2.239
2887	42310	7.0	21 3	5 51.77	69.97	5	2.770
2888	42295	5.2	21 3	6 0.13	74'94	4	3.002
2889	42396	7.1	21 3	7 43.75	71.31	5	2.085
2890	42355	7.5	21 3	7 51.24	76.72	5	3.148
2891	42394	7.5	21 3		78.72	3	2.717
2892	42384	7.7	21 3		74.58	5	3.039
2893	42452	8.2	21 3		78.74	4	2.360
2894	42444	7'3	21 3		74.53	4	2.589
2895	42431	7.5	21 4	0 3.41	71.35	5	3.109
2896	42470	6.6	21 4		70.75	5	2.231
2897	42476	7.7	21 4		72.75	5	5.811
2898	42457	7.0	21 4		72.35	4	3'142
2899	42479	7.8	21 4		79.75	I	2.802
2900	42463	6.0	21 4	3'37	76.29	5	3.120
2901	42524	7.2	21 4		71.08	6	2.738
2902	42542	7.0	21 4.		73.93	5	2.770
2903	42549	7.5	21 4		70.23	5	2.869
2904	42559	6.2	21 4		65.92	5	2.801
2905	42544	7.0	21 4;	3 51.14	65.66	I	3.362
2906	42586	7.0	21 4		76.08	4	2.292
2907	42581	7.5	21 4		69.90	3	2.817
2908	42569	8.0	21 4		80.08	3	3.513
2909	42594	7.5	21 4		72.13	5	2.724
2910	42606	7.7	21 4	4 43'94	74.23	5	2.262
2911	42598	8.0	21 4		79.72	I	2.781
2912	42614	6.7	21 4		78.20	6	2.607
2913	42619	7.0	21 4		71.20	5	2.935
2914	42631	7.2	21 4		75.89	4	2.822
2915	42654	6.3	21 40	28.39	72.14	5	+2.794
2916	42764	7.0	21 40	40.22	64.76	1	-0.283
2917	42694	8.0	21 4	14.46	77.28	2	+ 2*384
2918	42690	5.8	21 4		71.06	3	2.820
2919	42687	7.0	21 4	5'94	70.05	3	3,155
2920	42704	6.8	21 4	3 17.55	81.17	2	2.912
2921	42713	6.8	21 4		73.71	5	2.690
2922	42708	6.9	21 4		70.22	1	2.820
2923	42719	8.0	21 4		77'34	5	2.883
2924	42746	7.2	21 4		, 77°71	4	2.619
2925	42748	6.8	21 49	9 25.48	74.20	4	+2.626

No.	Mean N.P.D. 1875*0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2881	78° 55′ 28″.6	75.88	-	-16".18	W821,Sp8804, L,2749,
2882	61 48 44.0	71.37	5 6	16.18	W851,R9359. [Gl5549.
2883	63 48 50.1	77.78	4	19.10	See Notes.
2884	68 37 24.4	80.40		16.30	W 863, R 9364.
2885	0	69.73	3	16.31	W 838, R 9365, Sp8808,
2005	75 31 25.8	09/3		10 21	[L <sub>4</sub> 2754,Gl 5555.
2886	55 53 33 <sup>.</sup> 9 68 57 53 <sup>.</sup> 7	78.90	1	16.31	W 871, Y 9484.
2887	68 57 53.7	69.12	5	16.55	W 869, R 9373.
2888	84 53 19.0	75'12	5	16.33	See Notes.
2889	38 16 41.7	69.40		16.31	Oe 22716, RC 5369.
2890	95 18 11.7	74'72	6	16.32	T 10094, R 9410, R, L
2891	65 23 37.6	78.72	3	16.32	[4364, Y 9497.
2892	87 34 50.9	74'28	3 5	16.35	
2893	47 8 41.1	78.74	4	16.42	W 963.
2894	57 47 36.8	74'23	4	16.42	R 9454.
2895	92 47 22'0	71.35	5	16.43	W 942, L, 8526, Gl 5572.
, ,	9- 47	7- 33	-		94-,1 -31-0, 0:-337-1
2896	54 43 7'1	70.18	6	16.45	
2897	71 5 59.0	72.75	5	16.47	
2898	95 11 11.5	75'35	4	16.47	R, L, 4387, Gl 5580.
2899	70 39 20.6	79'75	I	16.48	$L_{e}$
2900	96 29 43.8	74.23	6	16.48	R 9470, Bn, L <sub>8</sub> 4390.
2901	66 6 52.9	71.08	6	16.22	W 1021.
2902	68 9 4.0	73'93	5	16.28	W 1028.
2903	74 49 11.5	70.23		16.60	W 1010, Gl 5590.
2904	70 7 7.7	65.92	5	16.61	W 1042, R 9524, L.
2905	111 7 24'2	64.76	I	16.62	$\mathbf{L}_{c}$
2906	57 16 10.7	76.08	4	16.63	W 1059. [L6.
2907	71 9 31.5	65.76	7	16.64	W1056,R9535,Ar4770,
2908	100 37 200	80.08	3	16.65	See Notes.
2909	64 59 11.5	72.13	5	16.65	W 1069, R 9543.
2910	55 45 31.3	74'53	5	16.66	W 1081.
2910	33 43 3	74 33	3	10 00	
2911	68 38 25.7	79.72	1	16.66	W 1076, R 9546.
2912	57 55 28.4	78.20	6	16.68	W 1083, R 9552. [5606.
2913	79 29 40'3	71.50	5	16.41	W 1058, R 9562, L4 2826, Gl
2914	71 16 40.7	75.89	4	16.41	W 1098, PM 2636, R
2915	69 18 49.8	72'14	5	16.75	W 1110. [9566, L <sub>6</sub> .
2916	12 20 51.7	59.91	1	16.76	Oe 22994, RC 5440, Bn.
2917	46 48 13.7	73'42	3	16.48	W 1132, RC 5432.
2918	70 55 13.5	70.77	5	16.81	W 1136, R 9600.
2919	93 53 22.2	68.68	5	16.82	See Notes.
2920	77 50 17.1	81.14	2	16.83	R 9614, L, 2845.
2921	62 14 34.6	73.71	5	16.83	W 1153, R 9618, Bn.
2922	70 52 13.5	71.17	5	16.84	W 1151, PM 2642, La:
2923	75 21 51.0	77:34	5	16.86	3,
2924	57 55 0.4	77.71	5	16.88	
2925	58 15 7.4	74.50	4	-16.80	Bn.
- 7-3	3- 23 /4	,,==			

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
2926 2927 2928	42725 42756 42797	7.5 6.8 6.8	21 <sup>h</sup> 49 <sup>m</sup> 21 49 21 50	34°78 45°00	80·32 69·82 71·76	2 5 4	+3*·153 2·582 2·611
2929	42780 42802	8·o 7·3	21 51	2.30	71.44 77.28	6	3.187 5.823
2931 2932 2933 2934 2935	42818 42849 42843 42846 42878	7°3 7°2 7°0 7°6	21 51 21 51 21 52 21 52 21 52	33'32 53'00 11'56 23'82 51'05	79 <sup>2</sup> 4 70 <sup>1</sup> 9 75 <sup>1</sup> 7 71 <sup>5</sup> 6 71 <sup>3</sup> 0	4 6 4 5 6	2.949 2.684 3.033 3.133 2.515
2936 2937 2938 2939 2940	42883 42875 42939 42898 42940	7'4 7'5 7'5 7'5 6'8	21 53 21 53 21 54 21 54 21 54	8.68 22.94 2.89 20.84 50.78	74'31 71'40 76'13 74'47 79'00	5 3 5 3	2.679 2.949 2.772 3.241 2.603
2941 2942 2943 2944 2945	42929 42943 42942 42977 42974	5.8 7.0 7.3 7.8 6.8	21 54 21 54 21 55 21 55 21 55	56· 57·04 7·20 36·93 50·58	69·62 77·83 56·92 74·48	5 3 1 5	2.979 2.631 2.802 2.293 2.521
2946 2947 2948 2949 2950	42972 42963 42989 42994 42995	8.0 6.8 8.0 8.0	21 56 21 56 21 56 21 56 21 56 21 56	0°35 23°62 37°70 42°16 52°38	81.00 69.55 72.38 74.12 75.67	3 6 5 5	2.739 3.182 2.883 2.782 2.909
2951 2952 2953 2954 2955	43018 43038 43073 43081 43091	7.7 6.8 7.0 6.2 7.2	21 57 21 58 21 59 21 59 22 0	14.56 21.76 2.94 27.49 0.34	71°92 81°79 78°18 72°20 76°20	5 1 5 6 2	2.676 2.957 2.646 2.743 2.961
2956 2957 2958 2959 2960	43104 43144 43142 43177 43160	6.0 7.8 7.1 7.2 7.2	22 O 22 I 22 I 22 I 22 I	38.60 14.42 20.33 23.13 29.54	72.41 78.90 71.02 77.50 74.30	3 1 4 4 5	3°202 2°749 2°967 2°194 2°695
2961 2962 2963 2964 2965	43151 43207 43196 43250 43256	6·5 7·8 7·0 6·2 6·9	22 I 22 I 22 2 22 3 22 3	31.23 43.84 31.02 38.01 44.35	72.95 79.78 71.46 70.18 74.52	5 5 4 4 5	2·865 2·572 2·765 2·414 2·367
2966 2967 2968 2969 2970	43249 43270 43266 43255 43258	7°5 7°0 6°9 7°9 6°0	22 3 22 4 22 4 22 4 22 4	52.72 5.17 8.77 21.55 29.36	77.75 79.93 74.69 68.53 72.73	5 5 5 5	2.626 2.354 2.442 2.849 +2.946

No.	Mean N.P.D. 1875	Epoch.	Obs.	Ann. Prec.	Authorities.
2926	96° 25′ 13″ 3	80.32	2	-16".89	Bn, Sp 8922, L <sub>3</sub> 4430.
2927	55 49 2.7		4	16.89	W 1180, R 9644.
2928	57 13 32.7	1	6	16.95	W 1120, Bn.
2929			Į.	16.92	W 1167, R 9662, Si, Sp
			3	16.96	R9669,L <sub>6</sub> .[8936,L <sub>5</sub> 3793.
2930	72 54 43	77.58	. 0	10 90	100009,116. [0930,1153793.
2931	80 9 10.3		4	16.98	W 1189, L, 2870, Gl
2932	61 16 58.5	70.09	5	17.00	[5641.
2933	86 48 52'3	75.68	5	17.01	See Notes.
2934	94 57 37 2	71.26	5	17.02	Sp 8954, L <sub>3</sub> 4441.
2935	51 40 7.0		6	17.04	W1275, R 9710, Y9631.
2936	60 46 13.6	74'31	5	17.06	See Notes. [2883, Gl 5654.
2937	80 1 16.1		5	17.07	W 1222, R 9718, Sp 8961, L4
2938	66 39 24 0		5	17:09	PM 2652, R 9737.
2939			3	17.11	See Notes.
		1	3		W 1331, Y 9644.
2940	55 58 10.7	79.00	5 .	17.14	W 1331, 1 9044.
2941	82 20 347	64.82	3	17'14	See Notes.
2942	57 35 44'2		3 6	17.14	W 1336.
2943	68 43 58.4		5	17.15	W 1337.
2944	41 32 507		2	17.17	Ar 4810, Oe 23215, RC
2945	,51 21 16.7		5	17.18	W1371,RC5507. 5505.
-943	31 21 10 /	74 40.	) 3	1,10	
2946	64 13 24.0		3 6	17.19	W 1370.
2947	99 6 8.8	69.55		17.21	W 1279, Sp 8988, L
2948	74 36 55'5	72.38	5	17.22	R 9780. [3820.
2949	67 1 23.5	74.13	5	17.22	
2950	76 33 48.8	75.67	I	17.23	W 1297, R 9783, Gl [5668.
2951	59 49 51.2	71.02	5	17.24	W 1408.
2952	80 21 51.4		I	17.29	W1323,R9799,L42917,
2953	57 39 49		5	17.33	W 1467. Gl 5679.
2954	63 56 1.2		5	17.34	R 9817. [2930, Gl 5686.
2955	80 30 49.8		2	17.37	W 1363, PM 2662, R 9820, L4
-933	30 49				[3831,Y9686,G15692.
2956	101 3 21.4		3	17.40	W 1373, Ar 4828, Si <sub>2</sub> 2481, L <sub>5</sub>
2957	63 59 11.6		I	17.42	W 1534. [5696.
2958	80 56 18.3	70.75	6	17'43	W1391, Sp 9026, L2 6224, Gl
2959	36 59 5.5	75.91	6	17.43	Oe 23385, Y 9699.
2960	60 17 29.3		5	17.43	W 1543.
2961	72 36 28.0	72.95	5	17.43	W 1539, R 9843, L.
2962	52 42 29.8		5	17.44	W 1554.
2963	65 3 58.0		5	17:48	W 12.
2964	44 52 157	1 .	5	17.52	W 46.
2965	42 40 39 9		5	17.53	Oe 23481, RC 5571, Gl
2966	55 28 54.9	77.75	I	17.53	W 49.
2967	42 5 43.4		5	17.54	Oe 23494.
2968	45 45 57 7		5	17.24	W 69.
2969	70 59 38.0		5	17.55	W 67, L6. Gl 5720.
	78 59 15.9		5	-17.20	W 53, R 9883, L, 2958,
2970					

No.	Lalande.	Mag.	Mean R	.A. 1875·0.	Epoch.	Obs.	Ann. Prec.
2971	43273	6.8	22 <sup>h</sup>	4 <sup>m</sup> 37**44	77:30	4	+2.627
2972	43286	8.0	22	5 37			3.202
2973	43314	7.2	22	5 41.95	81.79	1	2.723
2974	43319	7.0	22	5 43.97	76.27	4	2.613
2975	43309	7.5	22	5 56.21	71.76	5	3.049
2976		7.9	22	6 5.96	65.66	ı	2.800
2977	43331	6.5	22	6 19.52	71.44	4	2.784
2978		7.5	22	6 35.88	65.30	2	2.801
	43340	7.0	22	00	80.75		2.871
2979	4335 <b>5</b>					3	2.663
2980	43383	7.2	22	7 29.31	72.22	5	2 003
2981	43386	7.5	22	8 14.51	76.01	5	3.144
2982	43392	7.5	22	8 15.02	70.93	5	5.991
2983	43420	7.3	22	8 52.67	78.23	5	2.737
2984	43417	6.6	22	8 55.58	76.11	5	2.821
2985	43448	8.1	22	9 13.87	77.74	2	2*493
2986	43443	7.0	22	9 46.51	70.40	3	2.986
2987		9.0	22 1	0 28			1.882
2988	43493	4.8		0 31.24	71.93	6	2.607
2989	43524	7.5		1 36.75	75.10	5	2.778
2990	43518	7.0		1 39.72	69.20	5	3.081
2990	43310	, ,		39 /2	09 30	3	3 001
2991		9.1	22 1	1 57.			5,121
2992	43533	7.9	22 1	2 0.65	72.97	5	2.870
2993	43537	8.0	22 1	2 27.05	70.73	4	2.995
2994	43555	8.2	22 1	3 19'54	81.20	4	3'121
2995	43568	7.9		3 21.00	73.91	5	2.766
2996	43569	7.5	22 1	3 22.25	78.64	5	2.750
2997	43578	7.2		3 36.40	76.79	5	2.685
2998	43584	7.5	1	3 44.29	71.16	5	2.670
			l .	3 52.66	68.13	3	2.468
2999	43594	7'3 8'0	l			2	
3000	43601	80	22 1	4 51.29	75'73	-	3'144
3001	43630	6.9	22 1	4 58.21	74'30	5	2.632
3002	43635	7.0		5 20.27	71.16	5	2.722
3003	43660	7.0		5 22.54	74.69	I	2.929
3004	43648	7.0	22 1	6 0.38	70.78	4	2.012
3005	43650	7.9	22 1	6 17.63	72'12	5	3'012
3006	43645	6.5	22	6 32.74	66.23	2	3'349
3007	43686	7.5	1	6 49.55	76.79	5	2.740
3008	43672	7.8	1	6 53.97	78.83	2	2.082
3009	43706	7.5	1	7 11.64	72.94	4	2.696
3010	43707	8.0	1	7 43.28	76.60	4	3.099
2017	43715	8.0	22	7 52.60	81.75	2	3.193
3011			1		68.17	1	2'922
3012	43729	7.0	1			5	
3013	43734	7.3 6.8	1	_	70.10	5	2.625
3014	43751	I .		_	74.48	5	+2.022
3015	43736	7.7	22	18 30.74	80.75		T2 900
	1		1				

No.	Mean N.P.D. 1875-0.	Epoch.	Obs.	Ann. Prec.	Authorities.
2971	55° 23′ 55″ 4	77:30	4	17":57	W 80.
2972	101 40 50.8	66.75	2	17.61	See Notes.
2973	61 21 38.0	81.79	ī	17.61	Sec 1, 6005.
2974	54 21 2.3	76.80	5	17.61	W 113, Y 9741.
2975	87 52 53.0	71.76	5	17.62	W 84, Bn, L 8721, Gl
*973	0/ 32 33 0	1110	3	1,02	[5727.]
2976	66 50			17.63	R 9932.
2977	65 39 56.2	71'11	5	17.64	9,5
2978	66 51 28.2	64.94	1	17.65	W 133, R 9946.
2979	72 20 13'3	80.75	3	17.67	337
2980	57 1 00	72.25	5	17.68	
2981	96 30 94	76.01	5	17.72	[6250, Gl 5746.
2982	82 38 34.5	70.90		17.72	W 135, Si <sub>1</sub> , Sp 9080, L <sub>2</sub>
2983	61 2 47.7	78.23	5	17.74	W 187, PM 2686.
2984	68 5 47.7	76.11	5	17.74	W 186, R 9990, L
2985	46 57 29'1	77.74	2	17.76	5.00
			1		[Gl 5759.
2986	82 4 17.6	70'17	5	17.78	W 171,R 10003,L,6256,
2987	27 29 55'1	65.96	4	17.81	Ar 4890, Oe 23749.
2988	52 52 23.5	75'25	5	17.81	See Notes.
2989	64 14 150	75'10	5	17.85	
2990	90 51 35.3	69.40	6	17.86	See Notes.
2007	33 20 18.4	67.20		17.86	Ar 4895, Oe 23779.
2991		1	2		R 10058, L <sub>6</sub> .
2992	71 35 1°2 82 45 33°8	72.97	5	17.87	
2993		70.26	5	17.89	W 224, Si <sub>1</sub> , Gl 5780.
2994	94 41 32.5	81.20	4	17.92	W 238, Si <sub>2</sub> , L <sub>3</sub> 4543. W 288.
2995	62 56 36-7	73.91	5	17.92	W 200.
2996	61 46 46.5	78.64	5	17.92	W 289.
2997	57 7 9.8	76.79	5	17.93	
2998	56 5 10.4	71.16	5 5	17.94	W 295.
2999	44 37 16.1	67.78	5	17.94	W 302, Oe 23836.
3000	96 52 17.1	72.73	3	17.98	L, 4553, Y 9800, Gl 5792.
					7 .000
3001	53 19 45.3	72.87	6	17.98	W 322, R 10122, Y 9802.
3002	20 10 2.1	71'16	5	18.00	W 326, Bn. W 290, Bn.
3003	76 15 30.4	74.69	1	18.00	W 290, Bn.
3004	74 58 39.5	69.75	6	18.03	W 302, Gl 5802.
3005	84 9 23.4	71.01	6	18.04	Sp9145, L <sub>2</sub> 6276, Gl5803.
3006	115 23 40'1	66.23	2	18.04	T 10374, Ar 4908, RC.
3007	60 16 21.2	76.79	5	18.06	W 354.
3008	81 10 15.2	78.83	2	18.06	L. 6270, Note.
3009	57 2 3.5	71.65	5	18.07	W 360.
3010	92 41 391	76.61	5	18.09	W 342,Si <sub>5</sub> 1267,Gl 5811.
3011	101 47 200	81.75	2	18.10	W 346, Sia 2516, Sp 9157, L5
3012	75 21 0.3	67:37	5	18.10	W 356, R 10175, Sp 9158, Gl
3013	74 22 90	72.28	4	18.11	R 10181, L. [5813.
3014	52 3 46.5	74.67	4	18.11	W 384, Bn, Note.
3015	80 49 22.8	80.75	1	-18.13	W 368, Si, Gl 5819.

No.	Lalande.	Mag.	Mean R.	A. 1875·0.	Epoch.	Obs.	Ann. Prec.
3016 3017 3018	43748 43782	7'9 7'7 6'0	22 <sup>h</sup> · 13 22 1		75.77 73.36	5	+2"·991 2·795 3·329
3019 3020	43786 43776	6·5	22 I	9 21.86	80°42 70°76	4 3	2.714 3.549
3021 3022 3023 3024	43834 43836 43859 43867	6·7 7·8 6·5 7·5	22 20 22 20 22 2 22 2	0 56.00	76·53 78·91 71·54 76·20	5 1 5 4	2.806 2.991 2.655 2.958
3025 3026	43 <sup>8</sup> 54 43 <sup>8</sup> 86	6·0	22 2	1 57.72	73.34	2 5 6	3°3°4 2°62°
3027 3028 3029 3030	43891 43893 43915 43927	6·8 6·8 7·0 8·0	22 2 22 2 22 2 22 2	2 20.95 2 43.43	72.05 68.95 77.16 76.24	6 5 5 4	2.824 2.798 2.550 2.740
3031 3032	43943 43993	8·o 8·6	22 2	3 58.67	72.65 65.65	2 1	3.059 2.488
3°33 3°34 3°35	4394° 43978 43974	7°0 7°9 7°0	22 2. 22 2. 22 2.	4 42.29	75.98 81.42 70.24	5 2 ,4	2.752 2.998 3.140
3036 3037 3038 3039 3040	43981 44035 44019 44022 44040	7.5 8.5 7.5 7.7 8.0	22 2 22 2 22 2 22 2 22 2	5 45.01 5 59.79 6 0.44	76·76 71·55 72·77 75·11 76·57	2 5 5 5 5	3°106 2°646 3°139 3°054 3°050
3041 3042 3043 3044	44047 44073 44112 44154	7.8 5.0 8.5 7.0	22 20 22 20 22 20 22 20	6 25.53 7 51. 8 40.	79.87	3	2.889 3.276 3.092 2.942
3°45 3°46 3°47 3°48 3°49	44178 44161 44170 44195 44236	7.7 8.8 7.2 6.3 8.1	22 20 22 20 22 20 22 30 22 3	9 45°17 9 57°27 9 27°14 1 31°25	64.72 78.72 72.78 75.55 76.16	1 1 3 5	2.985 2.895 2.750 2.716 2.603
3050 3051 3052 3053 3054 3055	44229 44252 44223 44262 44298 44316	6·5 6·7 6·0 7·4 8·5	22 3 22 3 22 3 22 3 22 3	1 46.01 1 48.55 2 5.23 2 53.08	72.79 69.78 81.79 76.77 70.85 73.61	5 1 4 1 6	2.855 2.619 3.148 2.791 2.791 2.594
3056 3057 3058 3059 3060	44344 44346 44351 44379 44382	6.0 6.9 7.5 7.3 7.5	22 3. 22 3. 22 3. 22 3. 22 3.	3 54.91 3 55.98 4 27.28 5 3.45	79.45 74.74 73.78 79.45 69.04	1 4 5 3 4	2.703 2.688 2.900 2.851 +3.121

No.	Mean N.P.D. 1875.0	Epoch.	Obs.	Ann. Prec	Authorities.
Ī			!	<u> </u>	<u> </u>
3016	81° 53′ 46″·9	75'77	1	18" 12	R 10188.
3017	64 1 20'1	73.36	5	18.15	W 403.
3018	114 19 0.8	67.03	3	18.12	T 10389, Ar 4923, Oe
3019	57 50 31.4	80.42	4	18.12	[22144, L <sub>6</sub> , St 11736.
3020	107 22 34.5	69.76	5	18.12	T 10392, R 10209, Ar 4924,
3020	10/ 22 34 5	09 70	5	1017	[12 yr 2007, 9 yr 2104.
3021	64 42 25'1	76.23	5	18.18	W 420, R 10225.
3022	81 42 43.6	78.91	I	18.51	W 421, Gl 5832.
3023	53 11 30.7	69.85	6	18.55	PM 2714, Y 9856. [3838.
3024	78 23 19.3	76.80	5	18.25	W 443, R 10252, L4 3072, Gl
3025	112 42 29.5	67.67	2	18.22	Oe 22168, L, Y 9864, St 11747.
3026	50 40 25:6		_	18.25	W 467.
	50 49 35.6	73'34	5	18.52	W 475.
3027	65 50 43.2	72.95	5		W 478.
3028	63 37 2.8	68.21		18.59	W 470.
3029	46 31 2'9	77.16	5	18.27	W 487.
3030	60 50 34.8	76.54	4	18.29	W 495.
	00 . 0			0	[5847.
3031	88 35 48.4	69.95	4	18.32	W 481, Si <sub>1</sub> , L <sub>1</sub> 8864, Gl
3032	42 52 32.0	56.96	I	18.33	Ar 4947, Oe 24169, RC
3033	59 25 25.2	75'98	5	18.33	W 515. [5708.
3034	82 12 47.7	81.75	2	18.35	
3035	97 11 32.2	69.70	6	18.35	See Notes.
3036	93 33 4.6	71.48	4	18.35	W 494, Si, L, 4587, Gl
3037	51 23 44.9	71.22	5	18.38	W 547. [5853.
3038	97 6 39.4	72.77	5	18.39	W 519, R 10329, Si,
3039	88 3 17.8	75'11	5	18.39	L, 8874.  L, 4589.
3040	87 38 6.7	76.57	5	18.41	W529, L,8881, Gl5865.
		0		0	W are 1
3041	71 1 14.1	79.87	3	18.41	W 557, L.
3042	111 20 53.3	65.75	5	18.46	See Notes.
3043	92 10 8.0	58.76	3	18.48	W577, Ar4961, L, 8901.
3044	76 2 6.2	61.76	4	18.50	See Notes.
3045	80 19 5.6	54.72	1	18.21	W595, R10400, L43121, [Gl 5881.
3046	70 55 46 <sup>.</sup> 9	78.72	1	18.52	W 636, R 10406.
3047	57 51 25.7	70.58	2	18.23	W 645, R 10413.
3048	55 4 2.6	76.77	5	18.24	
3049	47 2 51.7	76.16	5	18.28	
3050	66 38 48.1	72.79	5	18.28	W 692.
2057	47 50 17:3	60:00		* Q.C.	
3051	47 50 17:3	69.90	7	18.59	W 641, R 10445, Si, L,
3052	98 32 47.8	81.79	I	18.59	W 713. [4615.]
3053	60 43 27.0	74.57	5	18.60	W 733.
3054	60 48 30.4	70.85	I	18.62	17 733.
3055	45 58 49.2	73.61	6	18.63	
3056	53 3 29.1	78.82	2	18.65	
3057	51 54 8.0	73'34	5	18.66	W 772, Y 9965.
3058	70 36 33.9	73.78	5	18.67	W 780, R 10494, L.
3059	65 26 27.6	79.45	3	18.69	W 805. [L <sub>3</sub> 4628.]
3060	95 45 12.8	69.04	4	- 18·7í	W 727, PM 2742, Sig,
	,				

No.	Lafande.	Mag.	Mean R.A. 1875.0.	Epoch.	Obs.	Ann. Prec.
3061 3062 3063 3064 3065	4443° 44459 4449°	7.0 7.0 8.5 7.5 8.2	22 <sup>h</sup> 36 <sup>m</sup> 30 <sup>s</sup> · 22 36 33'00 22 36 54' 22 37 28·80 22 38 5'14	74 <sup>.</sup> 3 <sup>2</sup> 74 <sup>.</sup> 7 <sup>2</sup> 72 <sup>.</sup> 59	4 5 5	+3"·147 3°036 3°148 3°046 2°719
3066 3067 3068 3069 3070	44486 44518 44520 44540 44519	6.0 7.4 8.3 8.0	22 38 40° 22 38 50°98 22 39 16'82 22 39 52'60 22 40 10'87	74'00 80'03 70'78 77'75	5 4 5 1	3.298 2.868 3.048 2.918 3.016
3071 3072 3073 3074 3075	44573 44605 44575 44568 44627	7.6 6.5 7.7 7.0 7.5	22 40 46·74 22 40 53·00 22 40 54·95 22 41 4·47 22 41 55·93	74.63 70.79 80.81 83.93 73.70	5 3 1	2.860 2.611 2.937 3.191 2.614
3076	44639	7.0	22 42 6:49	72 <sup>2</sup> 1	5	2·486
3077	44625	7.8	22 42 23:53	73 <sup>5</sup> 1	5	3·016
3078	44636	8.2	22 42 39:16	75 <sup>9</sup> 3	1	2·995
3079	44655	6.8	22 43 16:86	78 <sup>1</sup> 8	5	2·996
3080	44685	7.0	22 44 1:61	70 <sup>1</sup> 14	3	2·681
3081	44670	7.5	22 44 17.31	72·11	3	3.082
3082	44692	7.3	22 44 43.98	71·68	5	2.938
3083	44738	7.2	22 45 25.44	78·91	1	2.536
3084	44721	6.7	22 45 27.45	71·80	5	2.866
3085	44726	7.7	22 45 29.70	74·55	5	2.679
3086 3087 3088 3089 3090	44734 44770 44786 44782	7.0 7.5 7.9 6.8 8.0	22 46 10·81 22 46 19· 22 46 27·74 22 47 9·38 22 47 29·02	73.73 75.40 67.29 73.69	2 5 2 1	3°153 3°001 2°524 2°747 3°064
3091	44815	7.7	22 48 13.64	76·76	5	2·859
3092	44824	6.8	22 48 35.73	83·92	1	3·069
3093	44842	7.8	22 48 43.02	77·88	3	2·692
3094	44845	7.4	22 48 57.16	73·93	5	2·861
3095	44854	5.9	22 49 13.84	74·18	5	2·772
3096	44862	6.0	22 49 54'99	69.87	5	2.782
3097	44872	7.5	22 50 39'43	76.97	5	3.099
3098	44888	6.5	22 51 10'76	71.80	6	3.050
3099	44904	6.5	22 51 57'31	72.80	4	3.086
3100	44920	6.8	22 52 14'95	77.13	4	3.012
· 3101	44939	6·9	22 52 57.91	70·84	5	3.047
3102	44942	9·0	22 53 2.23	81·25	2	3.096
3103	44946	6·0	22 53 3.13	83·92	1	3.070
3104	44963	7·0	22 53 5.20	73·95	6	2.710
3105	44966	7·0	22 53 38.78	73·30	4	+3.042

No.	Mean N.P.D. 1875.0	. Epoch.	Obs.	Ann. Prec.	Authorities.
3061	98° 57′ 55″.3	65.72	2	-18"-74	W755,Ar5001,PM2745.
3062	85 41 8.7	74'32	4	18.74	W 760, Si,, Gl 5920.
3063			2	18.75	W765, T 10518, L, 3956.
	1 24			18.77	W 772, Y 9989, Gl 5922.
3064			5	10 77	W 772, 1 9909, G15922.
3065	52 57 20.3	72.29	5	18.79	W 877.
		1			[St 11857, B 487.
3066	115 53 38.9		3 6	18.80	T10526, Ar 5006, Y9995,
3067	66 16 38.8	72.62	6	18.81	W 893, Bn.
3068	87 1 33'4	80.03	4	18.82	W 810. [10585, L <sub>6</sub> .
3069	71 24 25.7		5	18.84	W 909, PM 2751, R
3070	83 4 29.4	1	2	18.85	W 821, R 10589.
30,10	-3 4 -97	1103	-		
3071	64 51 15.7	74.63	5	18.87	
			) 2	18.87	See Notes.
3072			3		
3073	73 25 29.8		3	18.87	R 10613.
3074	104 42 50.6		1	18.88	See Notes.
3075	44 27 1.8	73.70	1	18.90	Ar 5023, Oe 24658, RC
			1	1	[5832, RC <sub>2</sub> 2262.
3076	37 16 36 0	72.21	5	18.91	Oe 24662.
3077	82 48 52.2	73.21	5	18.02	W 868. [Gl 5955.
3078	80 7 37.2		I	18.92	W876, R 10644, L, 3202,
3079	80 10 50.2			18.94	Sp 9348, L, 3207.
3080	48 1 47.7	1	5	18.96	W 1008.
3000	40 1 4//	00 00	"	10 90	[9002, Gl 5963.
1		60.76	1 _	70.05	
3081	91 14 21.0	, , ,	5 8	18.97	W907, Si2, Si5 1299, Sp 9358, L
3082	72 39 35'1			18.98	W 1023, R 10684, L, Gl
3083	38 36 21.2		1	10.00	Oe 24756, Note. [5966.
3084	64 16 18.4	71.80	5	10.00	W 1040.
3085	47 25 26.2	74.21	5	19.00	RC 5854.
			1		[2573, L <sub>5</sub> 3985.
3086	100 43 19.9	73.73	2	19.02	W 933, R 10706, Si, Si,
3087	80 26 24.1		5	19.03	See Notes.
3088	37 38 4.3		5	10.03	Ar 5039, Oe 24781, Bn.
3089				19.02	W 1076, Note.
			4		W 967, T2, Sp 9384, L
3090	88 49 18.1	73.69	I	19.06	
	(0			0'	[9021, Gl 5987.
3091	62 38 51.5	1	5 6	19.08	W 1095, R 10736.
3092	89 36 4.0			19.09	See Notes.
3093	47 8 10.5	77.88	3	19.09	W 1110. [2060.
3094	62 39 24.2		5	19.10	W 1115, R 10739, 12yr
3095	53 35 21.8	74.18	5	10.11	W 1121.
			1		
3096	54 18 55.0	68.97	6	19.13	W 1133, Y 10081.
3097	93 54 48.0		8	19.14	W1033, PM 2768, Si2, Gl
3098	86 51 32.4		5	10.10	See Notes. [6004.
3099	92 4 43'7		4	19.18	L, 9040.
3100	81 18 25 4	1 .	4	10.18	See Notes.
3,100	01 10 25 4	11 13	4	1910	
2.2.	86 18 30.7	70176	6	T0:30	W1081,Sp9432,G16025.
3101				10.50	W 1083.
3102	93 33 18.2	, ,	5	19.20	See Notes.
3103	89 42 14.7		5	19.20	1500 110008.
3104	46 49 48.2		7	19.20	W 1006 Si Cl 6007
3105	85 30 37.2	72.20	5	-19.55	W 1096, Si, Gl 6027.
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No.	Lalande.	Mag.	Mean 1	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
3106 3107 3108 3109 3110	44969 44982 45001 45023 45037	7.5 8.0 7.7 6.0 6.7	22 22 22	53 <sup>m</sup> 53 54 54 55	47*·88 56·96 18·65 44·59 5·84	64·76 75·90 78·78 72·62 76·01	1 2 6 5	+3"·137 2*919 2*986 2*851 2*780
3111 3112 3113 3114 3115	45028 45044 45053 45063 45072	7.9 6.9 7.1 6.8 6.0	22 22 22	55 55 55 55 56	21.01 29.38 45.60 56.75 15.14	83.93 60.69 78.65 73.80 72.76	1 5 5	3·102 2·919 2·943 2·824 2·918
3116 3117 3118 3119 3120	45133 45112 45166 45180 45184	6·6 7·3 6·7 6·9 5·5	22 22 22	56 57 58 59	57'94 29'26 58'28 23'69 57'	78.08 72.60 71.07 77.82	4 5 4 4	2.938 2.921 2.917 2.917 3.229
3121 3122 3123 3124 3125	45203 45199 45200 45218 45241	6·5 6·2 7·8 7·5 6·2	23 23 23 23 23	0 0 0	18·24 19·68 25·69 38·56 18·80	71.60 73.38 83.93 74.40 74.61	4 5 1 5 5	2.821 2.952 3.047 2.764 2.945
3126 3127 3128 3129 3130	45233 45268 45265 45297 45323	7°2 6°5 7°5 8°5 6°9	23 23 23 23 23	I I 2 2	35.00 0.69 37.88 3.88	72.57 78.06 81.26 73.24 76.81	5 4 2 5 4	3.078 2.730 3.079 3.089 2.813
3131 3132 3133 3134 3135	45311 45334 45333 45350 45362	7.5 7.7 7.5 6.8 7.2	23 23 23 23 23 23	3 3 4 4	14.83 43.70 47.07 9.54 36.24	79 <sup>.8</sup> 4 76 <sup>.</sup> 06 7 <sup>2</sup> .55 73 <sup>.</sup> 40 68 <sup>.</sup> 46	3 4 4 5 5	3°162 2°992 3°034 2°862 2°918
3136 3137 3138 3139 3140	45394 45368 45386 45386 45409	6.0 7.1 7.5 8.0 8.2	23 23 23 23 23 23	4 4 5 5 6	40.67 52.93 12.56 27.19 15.48	75.07 77.50 73.81 75.75 75.80	3 4 4 3 2	2·775 3·048 2·777 3·143 3·061
3141 3142 3143 3144 3145	45426 45429 45436 45469 45490	6·9 7·7 8·2 7·4 7·0	23 23 23 23 23 23	6 6 7 7 8	27:40 46:26 1:04 33:30 9:29	74.00 81.86 75.54 70.84 72.82	5 2 4 5 5	2·845 3·027 3·062 2·993 3·132
3146 3147 3148 3149 3150	45496 45492 45498 45514 45543	7.0 7.5 6.5 7.4 7.0	23 23 23 23 23	8 8 8 9	17.33 18.19 26.74 34.21 48.41	73.99 81.24 77.57 73.41 77.55	5 2 4 3 4	2·906 3·164 2·943 2·794 +2·942

No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
3106	99° 32′ 57′′·8	65.41	I	-19".22	See Notes
3107	69 26 55.9	73.21	- 3	19.23	W 1213.
3108	77 12 5.9	78.78	2	19.54	W1117,R10784,L43272.
3109	59 35 16.3	72.62	6	19.25	W 1231.
3110	21 24 46.4	74.30	6	19.56	W 1243.
3111	94 30 49'9	83'93	ı	19.26	Y 10126, Note.
3112	67 35 51.5	59.80	1	19.27	Ar 5072, L.
3113	70 50 1.1	75.10	7	19.27	L <sub>6</sub> .
3114	56 3 28.4	71.77	6	19.28	W 1257.
3115	67 19 55.8	68.40	3	19.58	W 1265, L.
3116	69 45 10.3	78.08	4	19'30	W 1279.
3117	67 17 41.3	69.70	8	19.31	W 1295, L.
3118	66 9 8.7	70.45	6	19.35	W 1323.
3119	66 1 16.5	77.82	4	19.36	W 1334, Bn.
3120	114 25 7.2	65.73	4	19.37	T 10636, Ar 5092, Y
3120	114 25 /2	05 /3	4	1937	[10170, St 12016.
3121	53 51 15.4	70.86	5	19.38	W 1362.
3122	70 45 52.4	73.38	5	19.38	See Notes.
3123	85 38 22.7	83.93	I	19.38	W 1250, Sp 9492.
3124	48 4 57.0	74.44	5	19.38	
3125	69 32 23.9	74.61	5	19.41	W 1378.
3126	90 58 20.0	72.00	6	19.41	See Notes.
3127	44 36 27.5	75.95	6	19.41	See Notes.
3128	91 10 30.1	81.56	2	19.41	See Notes.
3129	93 7 47.4	73.24	5	19.43	W 4.
3130	51 45 40.8	73.13	5 6	19.44	W17, RC 5973, Y 10191.
3131	105 11 16.9	74.80	5	19.44	L. [L. 3323, Gl 6091.
3132	76 14 51.7	74.05	2	19.45	W26,PM 2795,R 10846,
3133	83 18 53.7	70.00	5	19.45	W 28, Si <sub>1</sub> .
3134	56 54 30.9	71.20	7	19.46	W 36.
3135	64 9 17.3	68.61	5	19.47	W 48.
	. ,				
3136	47 7 36.6	72.98	4	19'47	See Notes. [Gl 6096.
3137	85 40 27.8	75.65	6	19.47	W48,R 10858, Si, Bn,Y10209,
3138	47 1 18.8	72.19	5	19'48	W 63, RC 5986.
3139	102 36 42.7	72.22	5	19.49	W 57, PM 2798.
3140	87 59 16.4	75.80	2	19.51	W75,R10884,Sp9541,L, [9118, Gl 6103.
3141	53 42 41.6 81 43 0.0	72.12	6	19.21	W 83. [Gl 6105.
3142	81 43 0.0	81.86	2	19.51	W 82,R 10892, Sp 9551,
3143	88 o 18.4	73.97	5	19.52	See Notes.
3144	75 18 36.0	69.99	6	19.23	R10905,Sp9561,Gl6109.
3145	101 22 6.4	72.00	6	19.24	W 123.
3146	60 54 30.3	73.99	5	19.24	W 131, R 10923.
3147	106 55 7.1	76.08	3	19.24	Oe 22700, L.
3148	66 34 40.8	77.64		19.55	W 137, R 10925, L.
3149	46 58 45.5	69.75	5	19.55	W 146, RC 6007.
3150	65 54 37.2	77.55	4	-19.57	W 169, R 10943.
	1	55		, , ,	

3151	No.	Lalande.	Mag.	Mean R	.A. 1875·0.	Epoch.	Obs.	Ann. Prec.
3154   45620   7'2   2'3   11   48'87   73'49   4   2'91'3     3155   45640   6'8   2'3   12   2'161   77'80   1   2'932     3155   45633   8'0   2'3   12   30'81   79'82   2   3'134     3157   45655   7'5   2'3   12   35'69   75'26   4   2'894     3158   45659   7'3   2'3   12   40'55   77'10   4   2'877     3159   45670   7'5   2'3   13   11'37   71'54   4   2'824     3160   45677   6'4   2'3   13   28'27   71'89   4   2'889     3161   45672   7'3   2'3   13   28'27   71'89   4   2'889     3162   45678   8'0   2'3   13   28'89   79'20   5   2'936     3163   45680   7'5   2'3   13   48'89   8'279   1   3'093     3164   45714   7'0   2'3   14   27'   2'980     3165   45711   6'0   2'3   14   5'490   79'46   3   3'096     3168   45751   6'7   2'3   15   56'17   64'86   2   2'978     3170   45768   6'6   2'3   15   55'82   79'21   3   2'986     3171   45780   6'6   2'3   16   18'45   75'68   5   2'936     3172   45773   5'4   2'3   16   24'   3'174   45821   7'0   2'3   17   28'   3'174   45821   7'0   2'3   17   28'   3'174   45821   7'0   2'3   17   54'91   71'04   5   2'937     3176   45831   7'2   2'3   18   6'70   72'43   5   2'936     3176   45831   7'2   2'3   18   6'70   72'43   5   2'980     3176   45831   7'2   2'3   18   39'22   7'2'96   5   2'900     3178   45867   8'9   2'3   19   12'   2'936     3181   45886   7'4   2'3   19   58'27   7'926   2   2'886     3182   45894   8'0   2'3   20   2'37   6'730   2   2'933     3184   45886   7'4   2'3   19   58'27   7'926   2   2'886     3184   45896   7'7   2'3   2'2   3'16   7'160   3   2'932     3186   45905   7'0   2'3   2'2   3'16   7'160   3   2'932     3186   45905   7'0   2'3   2'2   3'16   7'160   3   2'932     3186   45994   7'0   2'3   2'3   3'168   7'554   4   2'882     3191   46002   7'9   2'3   2'3   3'160   5'54   4   2'882     3191   46002   7'9   2'3   2'3   3'160   5'54   4   2'882     3191   46002   7'9   2'3   2'3   3'160   5'754   4   2'882     3191   460047   7'9   2'3   2'3   3'160   5'754   4   2'882     3193   46033   8'0   3'3   3'1	3152		8.0	23 1	11 12.48			2.859
3155         45640         6'8         23         12         21'61         77'86         1         2'932           3156         45633         8'0         23         12         30'81         79'82         2         3'134           3157         45655         7'5         23         12         35'69         75'26         4         2'804           3158         45659         7'3         23         12         40'55         77'10         4         2'874           3160         45677         6'4         23         13         24'57         71'89         4         2'844           3160         45678         8'0         23         13         28'27         73'42         5         3'038           3161         45672         7'3         23         13         28'89         79'20         5         2'936           3163         45680         7'5         23         13         45'89         8'79         1         3'093           3164         45711         6'0         23         14         27'         2'980           3165         45711         6'0         23         14         49'24         71'99 <td< td=""><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></td<>				1				
3156 45633 8·0 23 12 30·81 79·82 2 31·34 3157 45655 7.5 23 12 35·69 75·26 4 2 894 3158 45659 7.3 23 12 40·55 77·10 4 2 877 3159 45670 7.5 23 13 11·37 71·54 4 2 889 3160 45677 6·4 23 13 24·57 71·89 4 2 889 3161 45672 7.3 23 13 28·27 73·42 5 30·38 3162 45678 8·0 23 13 28·89 79·20 5 2 936 3163 45680 7.5 23 13 46·89 82·79 1 3·93 3164 45714 7·0 23 14 27· 298 3165 45711 6·0 23 14 35·65 66·23 2 2 988 3166 45743 6·3 23 14 49·24 71·99 5 2 2824 3167 45784 7.5 23 15 36·17 64·86 2 2 2978 3170 45788 6·6 23 15 55·82 79·21 3 2936 3171 45780 6·6 23 16 18·45 75·68 5 2 2953 3172 45773 5·4 23 16 24· 3173 45807 6·9 23 17 54·91 71·04 5 2 2936 3174 45821 7·0 23 17 54·91 71·04 5 2 2937 3175 45843 6·5 23 18 39·22 72·96 5 2936 3176 45831 7.2 23 18 7·81 73·57 4 2 2968 3176 45831 7.2 23 18 7·81 73·57 4 2 2968 3176 45831 7.2 23 18 6·70 72·33 5 2980 3176 45831 7.2 23 18 6·70 72·33 5 2980 3176 45831 7.2 23 18 7·81 73·57 4 2 2937 3179 45888 7·0 23 17 54·91 71·04 5 2 2937 3179 45888 7·0 23 19 16·01 73·78 4 2 2936 3181 45886 7·4 23 19 58·27 79·26 2 2900 3178 45894 8·0 23 20 20·37 67·30 2 30·05 3184 45936 7·70 23 22 25· 3179 45888 7·0 23 20 20·37 67·30 2 30·05 3184 45936 7·70 23 22 25· 3188 45961 7·70 23 22 43·61 71·80 5 2 2903 3186 45965 7·0 23 22 25· 3188 45961 7·70 23 22 43·61 71·80 5 2 2903 3188 45961 7·70 23 22 43·61 71·80 5 2 2932 3186 45965 7·0 23 22 25· 3188 45971 7·0 23 22 43·61 71·80 5 2 2932 3186 45965 7·0 23 22 25·0 31·38 3187 45978 7·4 23 22 43·61 71·80 5 2 2932 3180 45994 7·0 23 22 43·61 71·80 5 2 2932 3190 45994 7·0 23 22 43·61 71·80 5 2 2907 3192 45998 7·5 23 23 3 41·40 65·75 1 3·160 3193 46033 8·0 23 24 31·16 75·64 6 30·303 3194 46047 6·5 23 24 31·16 65·75 1 3·160 3193 46043 8·0 23 24 31·16 65·75 1 3·160 3193 46043 8·0 23 24 31·16 65·75 1 3·160 3194 46047 6·5 23 24 31·16 65·75 1 3·160 3194 46047 6·5 23 24 31·16 65·75 1 3·160								
3157	3155	45040	0.0	23	12 21 01	77 80	1	2 932
3157	3156	45633	8.0	23 1	2 30.81	79.82	2	3.134
3159	3157	45655	7.5	23 1		75.26	4	2.894
3160				1				
3161			7.5					
3162	3100	45077	0.4	23	13 24.57	71.89	4	2.889
3162	3161	45672	7:3	23 1	13 28.27	73.42	5	3.038
3163       45680       7.5       23       13       46.89       82.79       1       3:093       3:045       3:093			8.0	1			5	
3165     45711     6.0     23     14     35.65     66.23     2     3'210       3166     45743     6.3     23     14     49.24     71.99     5     2.824       3167     7.0     23     14     54.90     70.46     3     3.096       3168     45751     6.7     23     15     20.44     74.10     3     2.885       3169     45754     7.5     23     15     36.17     64.86     2     2.978       3170     45768     6.6     23     16     18.45     75.68     5     2.936       3171     45780     6.6     23     16     18.45     75.68     5     2.953       3172     45773     5.4     23     16     24.     3'168       3174     45821     7.0     23     17     54.91     71.04     5     2.937       3174     45821     7.0     23     17     54.91     71.04     5     2.937       3175     45831     7.2     23     18     7.81     73.57     4     2.968       3177     45843     6.5     23     18     7.81     73.78     4     2.968       3179		45680	7.5					
3166				23 1	14 27			2.980
3167       3168       45751       6.7       23       14       54.90       79.46       3       3096         3168       45751       6.7       23       15       20.44       74.10       3       2.885         3169       45754       75       23       15       36.17       64.86       2       2.978         3170       45768       6.6       23       16       18.45       75.68       5       2.953         3171       45773       5.4       23       16       24.       3.16       24.       3.16       3.174       3.174       45821       7.0       23       17       54.91       71.04       5       2.937       3.174       45821       7.0       23       17       54.91       71.04       5       2.937       3.174       45821       7.0       23       18       6.70       72.43       5       2.937       3.174       45843       6.5       23       18       7.81       73.57       4       2.968       3.174       45857       8.9       23       19       12.       2.968       2.900       3.178       45858       7.0       23       19       16.01       3.78       4       2.9	3165	45711	6.0	23 1	4 35.65	66.23	2	3.510
3167       3168       45751       6.7       23       14       54.90       79.46       3       3096         3168       45751       6.7       23       15       20.44       74.10       3       2.885         3169       45754       75       23       15       36.17       64.86       2       2.978         3170       45768       6.6       23       16       18.45       75.68       5       2.953         3171       45773       5.4       23       16       24.       3.16       24.       3.16       3.174       3.174       45821       7.0       23       17       54.91       71.04       5       2.937       3.174       45821       7.0       23       17       54.91       71.04       5       2.937       3.174       45821       7.0       23       18       6.70       72.43       5       2.937       3.174       45843       6.5       23       18       7.81       73.57       4       2.968       3.174       45857       8.9       23       19       12.       2.968       2.900       3.178       45858       7.0       23       19       16.01       3.78       4       2.9	2166	45743	6.3	22 1	14 40.54	71.00	-	2.824
3168       45751       6·7       23       15       20·44       74·10       3       2·885         3169       45754       7·5       23       15       36·17       64·86       2       2·978         3170       45768       6·6       23       15       55·82       79·21       3       2·936         3171       45773       5·4       23       16       24·       3·168       3·168       3·168       3·168       3·174       45821       7·0       23       17       5·491       71·04       5       2·937       3·174       45821       7·0       23       17       5·491       71·04       5       2·937       3·174       45829       8·0       23       18       6·70       7·2·43       5       2·937       3·174       45843       6·5       23       18       7·81       73·57       4       2·968       3·174       45843       6·5       23       18       7·81       73·57       4       2·968       3·174       45858       7·0       23       19       16·01       73·78       4       2·968       3·174       3·19       45858       7·0       23       19       16·01       73·78       4		73773			, .			
3169       45754       7.5       23       15       36·17       64·86       2       2·978         3170       45768       6·6       23       15       55·82       79·21       3       2·936         3171       45780       6·6       23       16       18·45       75·68       5       2·953         3172       45773       5·4       23       16       24·       3·168         3173       45807       6·9       23       17       28·       3·174         3174       45821       7·0       23       17       54·91       71·04       5       2·937         3175       45829       8·0       23       18       6·70       72·43       5       2·937         3176       45831       7·2       23       18       3·9·2       7·9·6       5       2·908         3177       45843       6·5       23       18       3·9·2       7·9·6       5       2·903         3178       45857       7·0       23       19       16·0       73·78       4       2·903         3180       45866       7·4       23       19       58·2       7·9·26       2		45751					3	
3170     45768     6.6     23     15     55.82     79.21     3     2.936       3171     45780     6.6     23     16     18.45     75.68     5     2.953       3172     45773     5.4     23     16     24.     3.168       3173     45807     6.9     23     17     28.     3.174       3174     45821     7.0     23     17     54.91     71.04     5     2.937       3175     45829     8.0     23     18     6.70     72.43     5     2.937       3176     45831     7.2     23     18     7.81     73.57     4     2.968       3177     45843     6.5     23     18     39.22     72.96     5     2.900       3178     45857     8.9     23     19     16.01     73.78     4     2.968       3180     45866     7.3     23     19     16.01     73.78     4     2.903       3181     45886     7.4     23     19     58.27     79.26     2     2.886       3182     45894     8.0     23     20     20.37     67.30     2     3.065       3183     45892 <td></td> <td></td> <td>7.5</td> <td>_</td> <td></td> <td></td> <td></td> <td>2.978</td>			7.5	_				2.978
3172 45773 5.4 23 16 24. 3168 3173 45807 6.9 23 17 28. 3174 3174 45821 7.0 23 17 54.91 71.04 5 2.937 3175 45829 8.0 23 18 6.70 72.43 5 2.980  3176 45831 7.2 23 18 7.81 73.57 4 2.968 3177 45843 6.5 23 18 39.22 72.96 5 2.900 3178 45857 8.9 23 19 12. 2.925 3179 45858 7.0 23 19 16.01 73.78 4 2.903 3180 45866 7.3 23 19 48.29 78.00 5 3.038  3181 45886 7.4 23 19 58.27 79.26 2 2.886 3182 45894 8.0 23 20 20.37 67.30 2 3.065 3183 45892 7.0 23 20 25. 3183 45892 7.0 23 20 25. 3183 45892 7.0 23 20 25. 3183 45892 7.0 23 20 25. 3184 45936 7.7 23 20 57.62 73.69 3 3.042 3184 45936 7.7 23 20 57.62 73.69 3 3.042 3185 45951 7.5 23 21 42.10 71.60 3 2.932  3186 45965 7.0 23 22 32.87 70.82 4 3.111 3187 45978 7.4 23 22 43.61 71.80 5 2.879 3188 45971 7.0 23 22 45.01 76.01 5 3.013 3189 45969 8.0 23 22 50. 31.486 72.54 4 2.882  3191 46002 7.9 23 23 30.94 77.85 2 2.997 3192 45998 7.5 23 23 41.40 65.75 1 3.160 3193 46033 8.0 23 24 31.16 75.64 6 3.993 3194 46047 6.5 23 24 33.54 72.77 5 2.911	3170	45768	6.6	23	15 55.82	79.21	3	2.936
3172       45773       5'4       23       16       24'         3173       45807       6'9       23       17       28'         3174       45821       7'0       23       17       54'91       71'04       5       2'937         3175       45829       8'0       23       18       6'70       72'43       5       2'937         3176       45831       7'2       23       18       7'81       73:57       4       2'968         3177       45843       6'5       23       18       39'22       7'2'96       5       2'908         3178       45858       7'0       23       19       16'01       73.78       4       2'903         3180       45866       7'3       23       19       16'01       73.78       4       2'903         3181       45886       7'4       23       19       58'27       79'26       2       2'886         3182       45894       8'0       23       20       20'37       67'30       2       3'055         3183       45892       7'0       23       20       25'       3'169       3'138         3184	3171	45780	6.6	23 1	16 18.45	75.68	5	2'953
3173         45807         6·9         23         17         28·           3174         45821         7·0         23         17         54·91         71·04         5         2°937           3175         45829         8·0         23         18         6·70         72·43         5         2°937           3176         45831         7·2         23         18         7·81         73·57         4         2°968           3177         45843         6·5         23         18         3°22         72·96         5         2°900           3178         45857         8·9         23         19         12·2         2°95         2°925           3179         45858         7·0         23         19         16·01         73·78         4         2°903         3°038           3180         45866         7·3         23         19         48·29         78·00         5         3°038           3181         45886         7·4         23         19         58·27         79·26         2         2°886           3182         45894         8·0         23         20         20°37         67·30         2         3°0			5.4			,,,,		
3175         45829         8°o         23         18         6°7o         72°43         5         2°98o           3176         45831         7°2         23         18         7°81         73°57         4         2°968           3177         45843         6°5         23         18         39°22         72°96         5         2°900           3178         45858         7°o         23         19         12°         2°925           3179         45858         7°o         23         19         16°o1         73°78         4         2°903           3180         45866         7°4         23         19         58°27         79°26         2         2°886           3181         45886         7°4         23         19         58°27         79°26         2         2°886           3182         45894         8°o         23         20         25°         3°138           3184         45896         7°         23         20         25°         3°138           3184         45955         7°         23         22         5°62         73°69         3         3°042           3185         45965 <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td>				1				
3176	3174			23	7 54.91	71.04	5	2.937
3177     45843     6·5     23     18     39·22     72·96     5     2900       3178     45857     8·9     23     19     12·     2925       3179     45858     7·0     23     19     16·01     73·78     4     2903       3180     45866     7·3     23     19     48·29     78·00     5     2°938       3181     45886     7·4     23     19     58·27     79·26     2     2°886       3182     45894     8·0     23     20     25·7     3°365     3°343       3183     45892     7·0     23     20     25·7     3°69     3     3°042       3184     45936     7·7     23     20     57·62     73·69     3     3°042       3185     45951     7·5     23     21     42·10     71·60     3     2°932       3186     45965     7·0     23     22     32·87     70·82     4     3°111       3187     45978     7·4     23     22     45·01     70·82     4     3°111       3188     45971     7·0     23     22     50·1     76·01     5     3°171       3190	3175	45829	8.0	23	18 6.40	72.43	5	2.980
3178         45857         8.9         23         19         12.         2°925         2925         2903         290	3176	45831	7.2	23 1	18 7.81	73.57	4	2.968
3179         45858         7.0         23         19         16.01         73.78         4         2.903           3180         45866         7.3         23         19         48.29         78.00         5         3.038           3181         45886         7.4         23         19         58.27         79.26         2         2.886           3182         45894         8.0         23         20         20.37         67.30         2         3.065           3183         45892         7.0         23         20         25.762         73.69         3         3.042           3184         45936         7.7         23         20         57.62         73.69         3         3.042           3185         45951         7.5         23         21         42.10         71.60         3         2.932           3186         45965         7.0         23         22         32.87         70.82         4         3.111           3187         45978         7.4         23         22         45.01         71.80         5         2.879           3189         45969         8.0         23         22 <t></t>	3177			23 1	18 39.22			2.900
3180     45866     7'3     23     19     48'29     78'00     5     3'038       3181     45886     7'4     23     19     58'27     79'26     2     2'886       3182     45894     8'0     23     20     20'37     67'30     2     3'055       3183     45892     7'0     23     20     25'     3'138       3184     45936     7'7     23     20     57'62     73'69     3     3'042       3185     45951     7'5     23     21     42'10     71'60     3     2'932       3186     45965     7'0     23     22     32'87     70'82     4     3'111       3187     45978     7'4     23     22     43'61     71'80     5     2'879       3188     45971     7'0     23     22     45'01     5     3'171       3190     45969     8'0     23     22     50'       3190     45994     7'0     23     23     3'14'86     72'54     4     2'882       3191     46002     7'9     23     23     3'14'40     6'5'75     1     3'160       3193     46033     8'0     23 </td <td>3178</td> <td>45857</td> <td></td> <td>23 1</td> <td></td> <td></td> <td></td> <td></td>	3178	45857		23 1				
3181     45886     7.4     23     19     58.27     79.26     2     2.886       3182     45894     8°0     23     20     20°37     67°30     2     3°065       3183     45892     7°0     23     20     25°     3°138       3184     45936     7°7     23     20     57°62     73°69     3     3°042       3185     45951     7°5     23     21     42°10     71°60     3     2°932       3186     45965     7°0     23     22     32°87     70°82     4     3°111       3187     45978     7°4     23     22     43°61     71°80     5     2°879       3188     45971     7°0     23     22     45°01     76°01     5     3°171       3190     45969     8°0     23     22     50°     3°171     2°82       3191     46002     7°9     23     23     30°94     77°55     2     2°907       3192     45998     7°5     23     23     41°40     6°75     1     3°160       3193     46033     8°0     23     24     31°16     75°64     6     3°093       3194 <td></td> <td>45858</td> <td></td> <td>1 -</td> <td></td> <td></td> <td></td> <td></td>		45858		1 -				
3182     45894     8.0     23     20     20:37     67:30     2     3:065       3183     45892     7:0     23     20     25:0     3:138       3184     45936     7:7     23     20     57:62     73:69     3     3:042       3185     45951     7:5     23     21     42:10     71:60     3     2:932       3186     45965     7:0     23     22     32:87     70:82     4     3:111       3187     45978     7:4     23     22     43:61     71:80     5     2:879       3188     45971     7:0     23     22     45:01     76:01     5     3:013       3189     45994     7:0     23     23     24:501     76:01     5     3:171       3190     45994     7:0     23     23     14:86     72:54     4     2:882       3191     46002     7:9     23     23     30:94     77:85     2     2:907       3192     45998     7:5     23     23     34:40     65:75     1     3:160       3193     46033     8:0     23     24     31:16     75:64     6     3:093	3180	45800	7'3	23 1	19 48.29	78.00	5	3.038
3182     45894     8'0     23     20     20'37     67'30     2     3'065       3183     45892     7'0     23     20     25'     73'69     3     3'042       3184     45936     7'7     23     20     57'62     73'69     3     3'042       3185     45951     7'5     23     21     42'10     71'60     3     2'932       3186     45965     7'0     23     22     32'87     70'82     4     3'111       3187     45978     7'4     23     22     43'61     71'80     5     2'879       3188     45971     7'0     23     22     45'01     76'01     5     3'013       3189     45969     8'0     23     22'50'     3'171       3190     45994     7'0     23     23     14'86     72'54     4     2'882       3191     46002     7'9     23     23     34'140     65'75     1     3'160       3193     46938     7'5     23     24     31'16     75'64     6     3'093       3194     46047     6'5     23     24     33'54     72'77     5     2'911	3181	45886	7.4	23 1	19 58.27	79.26	2	2.886
3184     45936     7.7     23     20     57.62     73.69     3     3.042       3185     45951     7.5     23     21     42.10     71.60     3     2.932       3186     45965     7.0     23     22     32.87     70.82     4     3.111       3187     45978     7.4     23     22     43.61     71.80     5     2.879       3188     45971     7.0     23     22     45.01     76.01     5     3.013       3190     45969     8.0     23     22     50.     3.171     2.882       3191     46002     7.9     23     23     30.94     77.85     2     2.907       3192     45998     7.5     23     23     41.40     65.75     1     3.160       3193     46033     8.0     23     24     31.16     75.64     6     3.993       3194     46047     6.5     23     24     33.54     72.77     5     2.911	3182	45894	8.0	23 2	20 20'37		2	
3185     45951     7.5     23     21     42·10     71·60     3     2'932       3186     45965     7.0     23     22     32·87     70·82     4     3'III       3187     45978     7.4     23     22     43·61     71·80     5     2'879       3188     45971     7'0     23     22     45·01     76·01     5     3'013       3189     45969     8'0     23     22     50'     72·54     4     2'882       3191     46002     7'9     23     23     30'94     77·85     2     2'907       3192     45998     7'5     23     23     41·40     65·75     1     3'160       3193     46033     8'0     23     24     31'16     75·64     6     3'093       3194     46047     6'5     23     24     33'54     72'77     5     2'911			1 -					
3186 45965 7.0 23 22 32.87 70.82 4 3.111 3187 45978 7.4 23 22 43.61 71.80 5 2.879 3188 45971 7.0 23 22 45.01 76.01 5 3.013 3189 45969 8.0 23 22 50. 3.171 3190 45994 7.0 23 23 14.86 72.54 4 2.882  3191 46002 7.9 23 23 30.94 77.85 2 2.907 3192 45998 7.5 23 23 41.40 65.75 1 3.160 3193 46033 8.0 23 24 31.16 75.64 6 3.093 3194 46047 6.5 23 24 33.54 72.77 5 2.911				1 -				
3187     45978     7.4     23     22     43.61     71.80     5     2.879       3188     45971     7.0     23     22     45.01     76.01     5     3.013       3189     45969     8.0     23     22     50.     3.171       3190     45994     7.0     23     23     14.86     72.54     4     2.882       3191     46002     7.9     23     23     30.94     77.85     2     2.907       3192     45998     7.5     23     23     41.40     65.75     1     3.160       3193     46033     8.0     23     24     31.16     75.64     6     3.093       3194     46047     6.5     23     24     33.54     72.77     5     2.911	3185	45951	7.5	23 2	21 42.10	71.00	3	2.932
3187     45978     7.4     23     22     43.61     71.80     5     2.879       3188     45971     7.0     23     22     45.01     76.01     5     3.013       3189     45969     8.0     23     22     50.     3.171       3190     45994     7.0     23     23     14.86     72.54     4     2.882       3191     46002     7.9     23     23     30.94     77.85     2     2.907       3192     45998     7.5     23     23     41.40     65.75     1     3.160       3193     46033     8.0     23     24     31.16     75.64     6     3.093       3194     46047     6.5     23     24     33.54     72.77     5     2.911	3186	45965	7.0	23 2	22 32.87	70.82	4	3.111
3189     45969     8.0     23     22     50.       3190     45994     7.0     23     23     14.86     72.54     4     2.882       3191     46002     7.9     23     23     30.94     77.85     2     2.907       3192     45998     7.5     23     23     41.40     65.75     1     3.160       3193     46033     8.0     23     24     31.16     75.64     6     3.093       3194     46047     6.5     23     24     33.54     72.77     5     2.911	3187			23 2				
3190 45994 7.0 23 23 14.86 72.54 4 2.882 3191 46002 7.9 23 23 30.94 77.85 2 2.907 3192 45998 7.5 23 23 41.40 65.75 1 3.160 3193 46033 8.0 23 24 31.16 75.64 6 3.093 3194 46047 6.5 23 24 33.54 72.77 5 2.911				1 -		76.01	5	
3191 46002 7'9 23 23 30'94 77'85 2 2'907 3192 45998 7'5 23 23 41'40 65'75 1 3'160 3193 46033 8'0 23 24 31'16 75'64 6 3'093 3194 46047 6'5 23 24 33'54 72'77 5 2'911				1 0				
3192 45998 7.5 23 23 4140 65.75 1 3.160 3193 46033 8.0 23 24 31.16 75.64 6 3.093 3194 46047 6.5 23 24 33.54 72.77 5 2.911	3190	45994	7.0	23 2	23 14'86	72.24	4	2.005
3193 46033 8.0 23 24 31.16 75.64 6 3.093 3194 46047 6.5 23 24 33.54 72.77 5 2.911	3191			23 2	3 30.94			
3194 46047 6.2 5 23 54 33.24 75.42 2 5.011								
				_			1 1	
3195 40002 11 23 25 23 00 09 41 5 +2 942								
	3195	40002	7.7	23 2	5 23.00	09.41	5	T2 942

No.	Mean N P.D.	1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
3151 3152	102° 23′ 4 52 55	45″·2 18·7	69°45 68°50	3	19″·60	W 185,Si <sub>3</sub> 2618,Y 10262. W 208.
3153	19 52	25.4	64.58	3 6	19.60	Ar 5134, Oe 25372.
3154	60 13	23.9	72.06	5	19.61	W 217.
3155	63 4	39.9	77.80	Ī	19.62	
3156	102 51	16.5	75.45	3 6	19.62	W 228, Si, 2177.
3157	56 57	18.0	73.60		19.62	W 235.
3158	54 35	34.7	75.67	6	19.63	W 237. W 245.
3159	47 33	3.6	71.00	5 6	19.64	W 250, R 11019.
3160	55 53	25.9	69.55	U	1904	[6142.
3161	82 42	3.9	73.05	6	19.64	W 245, R 11017, Bn, Gl
3162	63 11	22.8	79.20	5	19.64	W 251.
3163	94 35	59.0	82.79	1	19.65	See Notes.
3164.	70 50	34.1	67.26	2	19.66	W 269, L. [St 12113.
3165	117 40	15.4	66.23	2	19.66	T10726, Ar5151, Y10296, [RC6043, Gl6154.
3166	46 34	1.5	71.09	5	19.67	W285, PM2814, Ar5155,
3167	95 21	25.7	79.46	3	19.67	See Notes.
3168	54 11	1.2	72.25	4	19.67	W 293.
3169	70 2				19.68	W 298, Ar 5160.
3170	61 59	12.3	78.84	4	19.68	W 308.
3171	64 45	59.2	75.68	5	19.69	W 315. [10305, St 12121.
3172	110 46	20.1	66.41	3 6	19.69	T 10736, Ar 5163, 7yr 1957, Y
3173	112 27	28.6	63.26		19.71	T10745, Ar5169, Y10316,
3174	61 0	48.4	69.50	8	19.72	W 344. St 12130.
3175	69 16	17.6	72.05	6	19.72	W 351, R 11121.
3176	66 55	32.1	72.01	5	19.72	R 11123, L6.
3177	54 19	27.5	71.20	7	19.73	W 363, Y 10325. W 371, Ar 5176, RC <sub>3</sub>
3178	58 13	1.5	62.93	5	19.74	W 371, Ar 5176, RC,
3179	54 31	21.0	73.78	5	19.74	W 374. [2327.
3180	81 45	28.2	75'79	6	19.75	R 11160.
3181	51 20	47.8	72.17	5	19.75	W 389. [9192, Gl 6182.
3182	88 12	34.6	61.19	3	19.75	W 383, Ar 5181, Sp 9658, L1
3183	105 56	6.3	66.71	2	19.76	L <sub>6</sub> , Y 10337. [6186.
3184	82 37	18.4	73.69	3 6	19.76	W 395, R 11186, Si,, Gl
3185	57 43	41.0	68.85	0	19.77	W 436.
3186	99 57	14.9	70.82	4	19.79	W 427, Si.
3187	48 16	36.8	71.80	5	19.79	D
3188	74 40	34.7	76.01	5	19.79	W 434, R 11224.
3189	114 43	37.8	67.19	2	19.79	R 11223, Oe 22862.
3190	48 19	44.0	69.95	8	19.80	
3191	52 2	43'7	77.01	5	19.80	On 20872 St 12160
3192	112 34	22.1	65.75	I	19.80	Oe 22873, St 12169. W 466.
3193	95 45	0.1	75.64	6	19.81	W 503.
3194	52 1	38.8	71.75	6	-19.83 -19.81	W 503. W 521.
3195	56 59	25.1	69.81	5	-19 03	321.
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No.	Lalande.	Mag.	Mean	R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
3196 3197	46084 46085	6.3	23 <sup>h</sup>	25 <sup>m</sup>	31ª·31	77.80	3	+2°.967
3198	46090	7.0	23	25	57.29	73'12	4	3.113
3199	46103	7.2	23	26	7.08	77.45		3.013
3200	46120	8.0		26	19.26	76.81	5	
3200	40120	00	23	20	19 20	70 01	3	2.945
3201	46117	8.0	23	26	29.86	69.55	4	3.084
3202	46144	8.0	23	27	25.	, 00		3.163
3203	46168	7.0	23	27	47'13	72.10	4	2.878
3204	46182	7:5	23	28	23.26	73.80	4	2.950
3205	46195	6.5	23	28	38.16	68.99	5	2.933
3206	46203	7.5	23	28	44.63	75.65	4	2.905
3207	46194	8.0	23	28	48.69	82.79	1	3.087
3208	46200	7.7	23	28	21.31	80.28	5	3.034
3209	46227	6.8	23	29	18.98	70.87	4	2.962
3210	46229	7.5	23	29	33.52	73.57	4	3,105
3211	46228	6.0	23	29	35.			3.164
3212	46240	7.3	23	29	41.76	77.41	4	2.082
3213	46255	6.8	23	30	18.29	73.32	4	2.963
3214	46274	7.7	23	31	3,05	74.72	I	3.002
3215	46294		_		41.48	75.60	3	3.048
3213	40294	9.0	23	31	41 /0	75 00	3	30/0
3216	46300	6.8	23	31	48.65	73.74	2	2.004
3217	46320	6.2	23	32	22.08	71.86	5	2.962
3218	46344	6.8	23	33	12.75	68.89	I	2.991
3219	46380	8.0	23	34	21.79	72.83	I	3.092
3220	46396	6.0	23	34	24.			2.953
3221	46399	6:5	23	34	40.22	83.93	1	3.102
3222	46409	6·5 7·8	23	34	47.38	70.30	2	2.068
3223	46420	6.8	23	34	53.	7030	_	2'947
3224	46398	7.0			22			2.024
3225	46423	1 .	23	35		70.83	I	2.000
3223	40423	7.0	23	35	3.51	7003	1	2 990
3226	46412	5.0	23	35	5.20	64.72	1	3.155
3227	46442	6.2	23	35	34.26	75.20	3	3.056
3228	46451	5.0	23	35	59.24	82.79	I	3.113
3229	46482	7.0	23	36	52.73	71.86	5	2.081
3230	46487	6.2	23	36	58.79	78.10	4	2.902
3231	46491	7.6	22	27	7.10	74'79	4	2.898
	46518	8.0	23	37	7.13	70.61		3.081
3232		1	23	38	7:44		5	}
3233	46532	7:3	23	38	35.29	74.74	4 2	3.075 2.889
3234	46524	6.2	23	38	43.02	73.29		3.036
3235	46541	6.2	23	38	45.05	71.25	5	3 020
3236	46553	7:3	23	39	16.54	76.47	5	3.045
3237	46567	7.5	23	39	35.46	80.37	4	2.996
3238	46576	7.5	23	40	6.65	82.79	1	3.095
3239	46583	7.1	23	40	8.02	75.41	5	3.011
3240	46586	7.5	23	40	24.08	64.73	I	+3.003
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No.	Mean N.P.D. 1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
3196 3197 3198 3199	62° 17′ 8″·3 102 14 2·7 101 41 21·1 73 17 6·6 56 56 56·0	75.03 65.73 72.55 74.39 76.81	4 5 6 7	-19"·83 19·83 19·84 19·84	W 524, R 11292. See Notes. [L <sub>5</sub> 4064. W497, R 11302, Si <sub>2</sub> 2643, W 503, PM2831, R 11309, W 543. [Gl 6221.
3200 3201 3202 3203 3204 3205	93 42 24.5 115 33 3.1 44 0 27.8 56 20 7.2	69.95 66.75 71.45 72.50 68.99	3 5 1 6 6	19.84 19.85 19.86 19.86	W 543. G1 6224. W 511, Sp 9709, L <sub>4</sub> 4756, Oe 22, 907, Y 10404, St 12200. R 11340, Oe 25747, liC 6112. W 578. W 590.
3206 3207 3208 3209 3210	52 40 2.0 47 29 20.1 94 32 45.8 78 1 39.0 58 29 36.1 99 27 23.3	73.65 74.25 80.58 70.67 72.45	5 6 2 5 5 6	19.87 19.87 19.87 19.87 19.88	[4759, Gl 6237. W 566, R 11360, Si <sub>2</sub> , L <sub>3</sub> W 568, R 11364, L <sub>3</sub> 3434, W 602. [Gl 6238. W 586, R 11376, Si <sub>3</sub> , Sp
3211 3212 3213 3214 3215	117 34 3.2 62 49 34.6 57 47 11.6 68 12 2.8 92 1 40.1	66·13 77·41 71·31 74·72 72·88	5 5 6 1 4	. 19.88 19.88 19.88	[9734, L <sub>5</sub> 4072. T 10819, Ar 5215, St R 11382, Bn. [12210. W 627. L <sub>6</sub> . [9261. W 628, Si <sub>2</sub> , Si <sub>5</sub> 1377, L <sub>1</sub>
3216 3217 3218 3219 3220	44 29 30.9 55 39 28.5 62 27 13.0 98 36 21.5 53 58 22.0	70.50 71.86 67.80 68.78 66.72	4 5 2 2 2	19.93 19.93 19.91 19.90	See Notes.  W 701, Notes.  W 684, Si <sub>2</sub> , L <sub>3</sub> 4763.  W 734.
3221 3222 3223 3224 3225	102 22 23.8 54 43 13.6 48 50 31.0 44 28 22.3 58 7 55.0	83.93 68.80 67.09 67.75 70.12	3 3 2 3	19.93 19.93 19.93 19.93	See Notes. W 740. W743,R11469,RC6154. Oe 25904. W 744.
3226 3227 3228 3229 3230	108 43 7.2 83 26 29.7 106 8 29.6 55 56 38.9 38 45 15.3	65.73 73.32 71.43 70.65 75.45	3 4 3 6 5	19.93 19.95 19.95	T10850,Ar5233,Y10452 See Notes. Oe 23004. W 791. Oe 25954.
3231 3232 3233 3234 3235	38 26 45.7 93 52 5.3 91 21 16.9 34 53 39.1 69 18 12.0	70°43 69°80 72°52 68°28 70°50	5 6 7 6	19.97 19.96 19.96 19.95	Oe 25956. W 755, Si <sub>2</sub> , Gl 6281. See Notes. [6170. T 10871, Ar 5246, RC W 821. [L <sub>4</sub> 3482, Gl 6292.
3236 3237 3238 3239 3240	77 32 27.8 57 24 12.1 99 41 20.7 61 59 25.5 99 35 30 4	73.69 77.60 70.25 73.80 64.73	7 5 4 6	19.98 19.98 19.98 19.97	W 777, R 11536, Sp 9817, W 794, Si., Sp 9829. W 842, Ar 5250. W 801, Si.

No.	Lalande.	Mag.	Mean R.A. 1875-0.	Epoch.	Obs.	Ann. Prec.
3241 3242 3243 3244 3245	46607 46606 46611 46616 46640	6·0 7·5 7·0 7·5 6·8	23 <sup>h</sup> 40 <sup>m</sup> 55 <sup>s</sup> ·64 23 41 4·84 23 41 10·66 23 41 19·03 23 42 13·32	64.76 70.84 77.31 70.58 70.01	1 1 2 4 5	+ 2° 903 3°032 3°021 2°999 3°024
3246 3247 3248 3249 3250	46642 46645 46680 46684	7'5 7'0 7'0 8'2 7'0	23 42 16·42 23 42 18·85 23 43 40·84 23 43 47· 23 43 47·67	74.08 71.68 77.67 83.92	4 4 5	3.018 2.998 3.092 2.896 3.091
3251 3252 3253 3254 3255	46688 46689 46698 46742 46746	6·8 7·7 7·3 7·7 6·7	23 43 51'32 23 43 53'62 23 44 8'90 23 45 29'80 23 45 35'20	73.40 78.80 76.65 71.82 70.40	5 2 5 4 5	3°029 3°044 3°046 3°066 3°008
3256 3257 3258 3259 3260	46757 46761 46769 46772 46791	7.5 6.0 6.5 6.0 7.5	23 45 51'97 23 46 4'65 23 46 12'72 23 46 14' 23 46 33'89	72·15 79·65 66·71	4 5 1	2.975 3.094 3.101 3.058 2.986
3261 3262 3263 3264 3265	46803 46808 46828 46832 46861	7.5 7.3 7.0 7.6	23 46 45.76 23 46 51.01 23 47 32.15 23 47 34.73 23 48 25.21	74.63 73.54 79.84 75.51 76.77	4 4 3 3 4	3.036 3.025 3.049 3.002 3.051
3266 3267 3268 3269 3270	46867 46883 46906 46909 46911	7°0 7°5 7°0 7°0	23 48 37·32 23 49 2·14 23 49 36·08 23 49 43·63 23 49 46·48	70'44 77'78 68'82 72'48 73'78	5 6 5	3.037 3.032 3.050 3.037 3.033
3271 3272 3273 3274 3275	46924 46937 46939 46981 47002	6.0 7.2 6.5 6.6 7.8	23 50 19.39 23 50 39.85 23 50 44.53 23 51 59.09 23 52 25.22	76·25 78·11 65·75 73·20 71·82	3 4 1 5 4	3.051 3.044 3.040 3.040
3276 3277 3278 3279 3280	47020 47026 47034 47041 47099	7.2 7.7 5.8 7.0 6.5	23 52 54 23 53 1: 23 53 7:13 23 53 22:50 23 54 56:47	73.70 73.95 71.05	5 2 4	3.015 3.016 3.046 3.036
3281 3282 3283 3284 3285	47098 47105 47094 47115 47123	8·0 7·0 6·6 5·5 7·0	23 54 59°26 23 55 11°78 23 55 18°92 23 55 33°12 23 55 50°16	76.61 80.05 70.22 83.92 78.12	5 5 5 1 3	3.069 3.057 3.059 3.075 + 3.078

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No.	Mean N.	P.D.	1875.0.	Epoch.	Obs.	Ann. Prec.	Authorities.
3241	220	14'	35"·8	64.76	1	- 19".98	Oe 26023.
3242	64	33	45.4	68.78	2	10.00	W 863.
3243	65	6	54.6	73.79	3	10.00	W 866.
3244		10	21.4	69.60	5	10.00	
3245	65	2	24'9	68.80	7	19.99	W 881.
3-43	- 3	_	- 7 )	,	'	- , , , ,	
3246	62	19	25'I	74.03	5	19.99	W 886.
3247	54	25	11.0	69.88	7	10.99	[Gl 6319.
3248	101	47	52'1	75.68	6	20.00	W868,6yr 1547,Si, 2674,
3249	28	28	49'1	65.45	3	20.00	Ar 5268, Oe 26068, RC
3250	100	40	21.9	83.92	1	20'00	See Notes. [6194.
							D (
3251	65	50	14.4	72.35	6	20.00	R 11650.
3252	73	2	55.4	78.80	2	20'00	W 873,R 11651,Gl6321.
3253	73	_5	2.6	76.65	5	20'00	R 11655.
3254	85	57	2.5	70.70		20'01	W898, Sp 9878, Gl 6330.
3255	52	48	4.8	69.25	7	20.01	
3256	40	34	53,5	70.20	6	20.01	Oe 26106.
3257	104	56	49.9	77.49	6	20.03	T 10912, Ar 5275, L6.
3258	109	15	26.0	66.71	I	20.03	Y 10525.
3259	79	44	22.5	65.41	1	20.03	See Notes.
3260	42	12	49.8	69.15	5	20.03	
	•		.,	′ ′		'	
3261	64	41	44'2	74.46	5	20.03	W 971.
3262	58	47	7.0	73.24	4	20.03	W 975.
3263	72	42	8.6	79.84	3	20'02	W 982, R 11723.
3264	46	8	24.1	70.64	6	20.03	W 985, RC 6209.
3265	71	56	56.0	76.77	4	20.03	R 11739.
3266	62		47.6	60:45	6	20.03	
3267		3 48	12.5	69.45	2	20.03	
3268	57 69	31	49.5	77.78 68.82	6	20.03	
3269	59	36	57°4	71.22	6	20.03	W 1019.
3270	57	12	28.0	73.78	5	20.03	W 1020.
3-7-	31		-0 9	1310	3	1 23	[11775, La
3271	68	2	54.0	72.84	6	20.04	W 1027, T 10945, R
3272	63	7	20.2	78.11	4	20.04	W 1034, R 11782.
3273	111	31	48.4	65.75	i	20.04	
3274	55	40	59.4	73.50	5	20.04	Bn.
3275	56	56	55.5	70.00	5	20.04	r ng:
							[2139, RC6249.
3276	40	9	57.9	65.41	8	20'04	Ar 5301,0e 26254, 12yr
3277	40	11	16.8	65.22	2	20.04	Ar 5302,0e 26258, 12yr
3278	56	58	5.2	73.70	5	20.02	[2140, RC 6250. W1069, Sp9947, Gl 6376.
3279 3280	90 40	58 42	33.2	73'95 69'80	6	20.02	Oe 26289.
3200	40	42	50 1	09 00	0	2005	00 2020y.
3281	83	54	16.5	74'13	6	20.02	W 1106, Gl 6385.
3282	62	16	16.4	76.14	7	20.02	W 1152.
3283	66	26	30.4	69.25	6	20.02	W 1153, R 11884.
3284	96	42	31.8	83.92	t	20.02	See Notes.
3285	104	6	18.4	77.05	4	- 20.02	W1122,Si <sub>4</sub> 2238,L <sub>5</sub> 4092.

No.	Lalande.	Mag.	Mean R.A.	1875.0.	Epoch.	Obs.	Ann. Prec.
3286 3287 3288 3289 3290	47142 47145 47150 47148 47152	7.0 8.0 7.0 7.7 8.1	23 <sup>h</sup> 56 <sup>m</sup> 23 56 23 56 23 56 23 56	8°·45 16·54 21·92 22·56 26·03	71.66 75.78 73.76 75.35 77.79	5 1 3 6 1	+3°065 3°058 3°057 3°071 3°061
3291 3292 3293 3294 3295	47171 47180 47202 47206 47215	7.5 7.7 6.0 7.0 7.2	23 57 23 57 23 58 23 58 23 58	0° 18.86 11.50 15.34 31.90	70 <sup>.</sup> 85 70 <sup>.</sup> 88 <b>73</b> <sup>.</sup> 44 <b>73</b> <sup>.</sup> 84	1 3 5 4	3.066 3.058 3.058 3.065 3.059
3296 3297 3298 3299 3300	47216 47229 47245 47250 47251	6·8 7·7 6·3 6·8 6·7	23 58 23 58 23 59 23 59 23 59 23 59	35.49 58.10 31.24 37.43 38.24	71.06 76.62 72.15 79.39 73.81	5 3 6 5 3	3.068 3.072 3.071 3.071 +3.070

No.	Mean N.P.D.	1875.0	Epoch.	Obs.	Ann. Prec.	Authorities.
3286 3287 3288 3289 3290 3291 3292 3293 3294 3295 3296 3297 3298 3298 3300	74° 26 62 9 54 52 88 33 62 26 70 I 48 40 48 36 56 25 45 I 63 I 87 5 66 7 65 46 50 16	13'3 51'0 48'5 42'0 27'3 21'5 11'3 47'7 12'0 17'1 23'9	72.86 75.78 70.75 75.35 77.79 66.90 68.88 70.10 73.44 74.02 71.06 75.56 71.20 79.39 72.75	6 1 5 6 1 2 2 4 5 5 5 5 6 5 5	- 20".05 20.05 20.05 20.05 20.05 20.05 20.05 20.05 20.05 20.05 20.05 20.05	W 1173, R 11908. R 11910. W 1180. [9383,Gl6396. W 1143, Bn, Sp 9967, L, W 1184, R 11915. W 1209, R 11922. W 1213, RC 6284. W 1236, RC 6292. W 1240. W 1256, Bn. Sp 9988. W 1284. W 1289. W 1291.

## NOTES.

The following pages contain a number of references to other Star Catalogues for which there was not space enough in the body of the Catalogue. I also give references to the lists of 480 stars with Proper Motion contained in Vol. VII. of the Bonn Observations (Arg.), and in an unpublished paper by Argelander, "Untersuchungen über neue Sterne mit Eigenbewegungen." The results of the latter are found in an inaugural dissertation by Dr J. Bischof: "Untersuchungen über die Eigenbewegung des Sonnensystems auf Grund von 480 Argelander'schen teleskopischen Fixsternen" (Bonn, 1884, 8vo.). Where no authority is given for the Proper Motion, it has been detected during the compilation of the present Catalogue, and has been deduced from all the materials available, Lalande's observations having been reduced anew by von Asten's tables.

No. in Cat.	Lalande.	
47 85	427 865	W 261, CA 7, Ar 52, RC2 24, Si, 20, Sp 121, Y 162. 13 Ceti. W 472, T 151, Ar 106, Si2, 12 yr 32, 6 yr 32,
87	880	7 yr 38, N 7 yr 56, Sp 197, 9 yr 38, Gl 156. W 479, T 154, N 7 yr 57, RC <sub>2</sub> 53, Si <sub>5</sub> 37, L <sub>1</sub> 103, Y 273,
90	892	Gl 158, St 215. W 484, Ar 110, T <sub>2</sub> , R <sub>2</sub> 233, 7 yr 40, N 7 yr 58, RC <sub>2</sub> 54, Y 275, St <sub>1</sub> 19, Gl 159.
163	1992	W 1071, T 352, A 241, Si <sub>1</sub> , N 7 yr 141, RC <sub>2</sub> 125, Sp 370, Y 583, Gl 274.
192	2539	W 267, Ar 303, Si <sub>2</sub> , 12 yr 108, 6 yr 76, Y 673', St 542, B 21.
217	2999	W 522, T 529, R 364, Ar 361, Si <sub>2</sub> , R <sub>2</sub> 791, RC <sub>2</sub> 191, Si <sub>3</sub> 121, Sp 487, Y 760, St 640; the Proper Motion in RA does not exceed +0°020, as already remarked in the Edinburgh Cat.
233	3244	W 696, T 578, Ar 390, Si <sub>2</sub> , Y 820, St <sub>1</sub> 54, Gl 384, St 695.
254	3618	T 640, Oe 1182, 7 yr 175, Y 901, 9 yr 181, St, 66, St 763, B 36.
277	3922	W 1075, Si <sub>1</sub> , Si <sub>2</sub> , Bn, Si <sub>5</sub> 178, L <sub>1</sub> 316, Y 965, Arg. 23 (Pr. Mot. – 0*0185 and + 0"374).
296	4254	T 763, R 583, 12 yr 204, 7 yr 148, N 7 yr 308, RC, 282, 9 yr 210.
300	4321	PM 221, T 772, Ar 510, Bn, 7 yr 149, N 7 yr 313, RC <sub>2</sub> 284, Y 1041, St 917. Is Arg. 27, the Pr. Mot. = +0*0005 +0"239. See also Dunsink Obs. Part 4.
307	4381	W 347. There seems to be negative Pr. Mot. in RA, but unfortunately we have only one obs. in RA, though there are four in PD.

No. in Cat.	Lalande.	
310	4449	W 268, Ar 525, Si <sub>1</sub> , 7 yr 153, N 7 yr 321, Y 1070, St <sub>1</sub> 82, 9 yr 216, Gl 537.
338	4818	30 Arietis (foll.) W 693, PM 253, T 867, Ar 564, R 667, RC 1861, R, 1341, 12 vr 224, Bn, RC, 314, Y 1140.
342	4927	B 59. Arg. 32, Pr. Mot. = +0°·0130 +0°·017. W 547, T 886, R 680, Ar 577, 6 yr 162, 7 yr 169, N 7 yr 349, RC <sub>2</sub> 323, Sp 745, L <sub>1</sub> 387, Y 1169, 9 yr 242, Gl 600, St 1057.
347	4975	CA 72, T 900, R 687, Ar 585, Oe 3088, 6 yr 165, RC 777,
384	5490	Arg. 37, Prop. Mot. + 0° 0998 + 0" 688.
388	5672	Ar 657, T 1032, Oe 1987, 6 yr 194, RC 867, 7 yr 200, RC <sub>2</sub> 366, Y 1307.
413	6072	LL is o*.59 and 11".4 less (only one wire), but W and Sp agree with Ar <sub>2</sub> .
418	6106	Has probably a slight positive Proper Motion in NPD.
419	6158	T 1128, Ar 711, Oe 2186, 6 yr 212, Y 1383, St 1371,
	6-22	B 80.
425	6275	Very slight Pr. Mot. in NPD possible.
420	6254	Proper Motion = $+ \circ^{s} \cdot \circ $
448	6638 6912	W 698, T 1266, Ar 787, Si <sub>2</sub> , 12 yr 317, 6 yr 243, 7 yr
460	0912	259, N 7 yr 466, Si <sub>4</sub> 300, 9 yr 346, St 1552.
462	6938	Proper Motion in RA = + o*o24 (Asten's tables make the RA o*o69 greater than Baily).
475	7097	Arg. 47, Pr. Mot. = $-0^{\circ}.0420 - 0''.167$ .
478	7146	W 987, PM 386, R 1016, Ar 825, R 1990, 12 yr 334, 6 yr 250, N 7 yr 486.
483	7253	T 1341, Ar 833, RC 1105, N 7 yr 494, Y 1717, Bn, St <sub>1</sub> 135, St 1649.
495	7456	T 1373, Ar 849, RC 1127, N 7 yr 506, RC <sub>2</sub> 447, Y 1746, St 1693.
521	7892	Pr. Mot. = $+ 0^{8} \cdot 027 + 0'' \cdot 080$ .
538	8178	T 509, R 1163, Ar 923, R <sub>2</sub> 2247, 12 yr 364, 6 yr 278, RC 1213, 7 yr 314, N 7 yr 544, Y 1869, 9 yr 403.
565	8618	Very slight positive Pr. Mot. in NPD possible.
575	8775	W 694, T 1633, R 1242, Ar 1000, 6 yr 305, 7 yr 332, Y
-0.		Observed for Ar 1009, but the latter is = DM + 44°,
583		1013 = LL 8814, the rough PD being erroneous, it should be 45° 32'.
624	9491	Proper Motion in RA = + o*·007. There does not seem to be Pr. Mot. in PD.
634	9647	T 1825, Ar 1112, 12 vr 422, RC 1408, 7 vr 370, N 7 vr
664	10145	643, RC, 574, Y 2157, St, 186, 9 yr 473, St 2225. W 391, T 1957, Si, Ar 1183, N 7 yr 687, 9 yr 505, Gl 1320.
677	10394	Proper Motion = + o*cos + o":25. The NPD was also
		observed twice in 1859-60, 100° 9′ 55″.4, Epoch 1860°00. The PM in RΛ is somewhat doubtful. RΛ is mis- uvinted for r*1.4 read 4*1.44.
689	10548	printed, for 5°·14 read 4°·14. T 2058, Ar 1247, 12 yr 474, 6 yr 400, RC 1521, N 7 yr 725, RC, 627, Y 2326, 9 yr 530.

No. in Cat.	Lalande.	
708	10895	W 1273, T 2130, R 1555, Ar 1283, R <sub>2</sub> 2723, 12 yr 487, 6 yr 409, Y 2380.
729	11196	Proper Motion = $+ o^* \cdot o_{35} + o'' \cdot s_{3}$ .
741	11374	Has probably Pr. Mot. in NPD
743	11447	W 1820, R 1687, Ar 1365, 12 yr 522, 7 yr 453, 9 yr 578. W 1540, T 2304, Ar 1382, Oe 4621, Bu, 7 yr 459, Si,
751	. 11637	510, L <sub>5</sub> 199, St 2780.
753 772	11700	T 2326, Ar 1386. Oe 4665, Bn, N 7 yr 787, St 2801. W 265, T 2404, Ar 1426, Si, Sp 2128. Arg. 301, Pr. Mot. = -0*0162 - 0'*162.
788 812	12296	Pr. Mot. = -0°·031+0″·21. Lalande has two obs. PM 758, T 2593, Ar 1518, Oe 7126, RC 1789, RC <sub>2</sub> 719, B 179.
848		T 2812, Ar 1600, Oe 6085, 12 yr 627, 6 yr 530, RC 1878,
857	13849	Bn, 7 yr 538, RC <sub>2</sub> 754, Y 2845, St <sub>1</sub> 261, St 3370. Pr. Mot. = -0"011+0"52 (Frisby, Astr. Nachr., No. 2583).
873 918	14264	Very slight Pr. Mot. in NPD possible.  Observed for LL 15060. Minute of NPD possibly uncertain. Magnitude from the Berlin maps.
977	16304	Arg. 74, Pr. Mot. = $+ o^{8} \cdot o187 + o'' \cdot 975$ .
985	16494	Proper Motion = $+ \circ$ 010 + $\circ$ 23.
995	16616	Pr. Mot. = -0°0092 + 0"362 (Frisby, Astr. Nachr., No. 2683).
1010	16964	Pr. Mot. = $-0^{\circ} \cdot 003$ and $+0'' \cdot 18$ is probable.
1051	17802	W 1385, T 3928, Ar 1996, Si <sub>1</sub> , 7 yr 686, RC <sub>2</sub> 914, Sp 3315, Y 3803, Gl 2318.
1055	17853	Arg. XXX.; the Pr. Mot. (-0°0125+0"158) is confirmed.
1080	18315	W 186, T 4060, Ar 2043, Si <sub>2</sub> , N 7 yr 1139, Sp 3414, L <sub>3</sub> 564, St <sub>1</sub> 369.
1107	18832	W 597, Si <sub>2</sub> , Si <sub>5</sub> 421, Sp 3518, L <sub>1</sub> 2542, Gl 2480.
1115	18984	T 4260, Ar 2120, 7 yr 744, RC <sub>2</sub> 974, Sp 3551, L <sub>1</sub> 2588, Gl 2511, St 2516.
1194	19991	W 166, T 4582, Ar 2236, Si <sub>2</sub> , 12 yr 870, L <sub>2</sub> 850, 9 yr 974, St 5607.
1210	20191	W 295, T 4649, R 3178, Ar 2260, Si, 12 yr 885, N 7 yr 1263, L, 345, Y 4333, Gl 2710, St, 414.
1237	20554	W 613, CA 229, Ar 2311, 12 yr 903, RC 2531, 7 yr 825, N 7 yr 1291, RC, 1046, Y 4434.
1266	20961	W 844, Si, Si, T, L, 3127, Y 4545, Gl 2822, St 6019.
1270	21006	W 876, T 4938, R 3401, Ar 2375, 7 yr 847, N 7 yr 1329, RC, 1065, L, 3137, Y 4568, Gl 2833.
1284	21164	W 979, T 4993, Ar 2390, Si <sub>2</sub> , 7 yr 855, N 7 yr 1339, L <sub>1</sub> 3169, Y 4608, St 6095.
1294	21358	Proper Motion in RA = $-0^{\circ}$ or 7. There seems to be none in PD.
1324	21828	W 358, Ar 2488, Sp 4150, L, 3342, Y 4780, Gl 2957.
1347	22148	W 606, T 5372, R 3702, Ar 2527, 7 yr 923, RC, 1125, L, 671, 9 yr 1083, Gl 3013.
1383	22585	W 914, Si <sub>2</sub> , Bn, Sp 4328, L <sub>6</sub> 1089, Y 5019, Arg. 113. Pr. Mot. = +0*0070+0"468.

No. in Cat.	Lalande.	
1387	22632	W 1086, T 5322, R 3790, Ar 2586, 12 yr 988, Bn, RC <sub>2</sub> 1156, Y 5031, Gl 3084, Arg. 114, Pr. Mot. = - o*-0359 + o"-571.
1394		Ar 2596, Oe 12318, T2, 12 yr 990, RC 2799, 7 yr 953, N
1399	22798	7 yr 1443, 9 yr 1111. W 7, PM 1383, Si <sub>8</sub> 1417, L <sub>5</sub> 1111, Y 5070, Arg. 336, Pr. Mot. = +0*0223+0"*182.
1432		W 344, T 5730, Ar 2679, Si, L, 924, Gl 3178.
1440	23396	W 497, R 4002, Ar 2695, N 7 yr 1486, 9 yr 1158, Gl
1462	23640	Pr. Mot. = $-\circ^{\circ}$ 017. No PM in NPD.
1477	23808	W 659, CA 286, T 5869, R 4118, Ar 2742, Si, 7 yr 1005,
		RC, 1228, L, 559, Gl 3251.
1484	23913	T 5898, Ar 2755, 12 yr 1026, 7 yr 1010, N 7 yr 1520, 9 yr 1182, Gl 3260, St 7080.
1494	23989	W 922, T 5923, Ar 2766, N 7 yr 1525, Gl 3269.
1517	24294	W 967, Si <sub>2</sub> , Si <sub>5</sub> 512, Sp 4713, L <sub>1</sub> 3959, Gl 3309.
1527	24414	Arg. 129, Pr. Mot. = +0*.0054 +0".715.
1554	24760	Not in any other Catalogue. Seems to have Pr. Mot. in RA = -0.01031. LL has two observations.
1580	25049	W 426, T 6269, R 4348, Ar 2890, Sp 4845, Y 5591, 9 yr
1602	25380	W 670, PM 1558, 12 yr 1092, 6 yr 865, Sp 4913, L, 1293, Gl 3435.
1636	25862	T 6562, R 4586, Ar 2997, Oe 13376, RC 3132, 7 yr 1125, RC <sub>2</sub> 1352, St 7718.
1651	26056	W 90, R 4640, Si, Si, 1594, Sp 5066, L, 4313, Gl 3526.
1654		W 90, Ř 4640, Si, Si, 1594, Sp 5066, L, 4313, Gl 3526. Companion to κ Bootis. T 6649, Ar 3029, 12 yr 1136, RC 3164, RC <sub>2</sub> 1376, 6 yr 889.
1670	26247	T 6703, Ar 3050, Bn, N 7 yr 1656, RC <sub>2</sub> 1390, Y 5934, St 7846.
1681	26375	T 6747, Ar 3062, Oe 13643, 7 yr 1149, N 7 yr 1660, Y 5966, St, 575, St 7884.
1682	26422	W 382, T 6758, Si <sub>2</sub> , N 7 yr 1663, L <sub>3</sub> 1696, Y 5973, 9 yr 1319, St 7891.
1688	26464	W 407, T 6771, R 4720, Ar 3070, Si <sub>1</sub> , L, 4402, Y 5983, Gl 3588.
1706	26731	W 691, R 4775, T <sub>2</sub> , 12 yr 1171, RC 3238, N 7 yr 1671, Y 6040, Gl 3620.
1712		T 6874, Ar 3100, Oe 13864, N 7 yr 1674, Y 6054, St 8007.
1724		T 6916, Ar 3119, Oe 13962, 12 yr 1190, 6 yr 925, RC, 1424, Y 6098, St 8074.
1726	26995	PM 1661, T 6919, Ar 3121, Oe 13981, 12 yr 1191, 6 yr 926, RC, 1425, Y 6102, 9 yr 1338.
1727	27055	by the Armagh place, as one of the screws binding the telescope to the circle was loose.
1733	27177	T 6967, R 4865, Ar 3136, Bn, Y 6140, St 8141.
1755	27572	W 1322, CA 345, R 4949, Ar 3172, RC <sub>2</sub> 1458, 7 yr 1202, Gl 3726. Pr. Mot. = +0*010 +0"·18 (Stone).
1757	27563	T 7064, Ar 3174, Oe 14307, Y 6234, St 8243.
1768	27744	T 7064, Ar 3174, Oe 14307, Y 6234, St 8243. W 99, Bn, RC <sub>2</sub> 1463, Si <sub>5</sub> 682, L <sub>1</sub> 4651, Gl 3752; Arg. 161, Pr. Mot. = -0°0804 + 0°502.

No in Cat.	Lalande	
1772	27781	T 7119, Ar 3186, Oe 14408, 7 yr 1213, 9 yr 1366, St 8301.
1776	27904	W 237, R 5013, 12 yr 1235, 6 yr 964, N 7 yr 1721, Y 6284.
1783	27957	Pr. Mot. = $-0^{\circ}.022 + 0''.265$ .
1813		T 7253, Ar 3236, Oe 14658, 6 yr 981, Y 6398, St <sub>1</sub> 624, St 8467, B 323.
1824	28498	T 7298, R 5143, Ar 3259, Oe 14750, 12 yr 1276, 7 yr 1241, RC, 1500, Y 6450, St, 632, 9 yr 1395, St 8516.
1832	28607	Pr. Mot. = $-o^{s} \cdot 080 + o'' \cdot 35$ (Weiss, V.J.S. XIII., p. 174).
1835	28673	W 707, T 7331, R 5163, Ar 3273, Si,, N 7 yr 1763, Gl 3869.
1847	28804	T 7360, Ar 3290, Oe 14933, 12 yr 1291, RC 3450, RC, 1517, Y 6525, St, 644, 9 yr 1412, St 8608.
1852	28878	T 7376, Ar 3299, Oe 14974, 7 yr 1264, N 7 yr 1780, RC, 1521, Y 6544, St, 647, 9 yr 1416, St 8628.
1855	28891	T 7382, Ar 3304, Oe 14983, 6 yr 1007, Y 6549, 9 yr 1417, St 8632.
1859	28975	W 908, T 7400, Ar 3314, Si, L, 595, Gl 3913.
1861	28987	South comp. of Double. PM 1756, W 917, Si <sub>2</sub> , Bn, Si <sub>5</sub> 759, Sp 5637, L <sub>1</sub> 4910, Gl 3918.
1865		T 7413, Ar 3319, Oe 15077, 12 yr 1307, RC 3470, 7 yr 1279, N 7 yr 1795, RC, 1535, Y 6586, St, 653, 9 yr 1429, St 8676.
1867	29070	W 972, R 5246, Si <sub>5</sub> 765, Sp 5652, L <sub>1</sub> 4932, Arg. 377, Pr. Mot. = -0*0184 - 0"087.
1870	29110	W 1000, T 8334, R 5253, Ar 3329, Si <sub>2</sub> , N 7 yr 1803,
1872		L <sub>3</sub> 2083, Gl 3938. The "new star" T Coronæ, Bn, N 7 yr 1804, Y 6609, 9 yr 1434.
1873	29138	W 1015, T 7440, Ar 3330, Si <sub>1</sub> , 12 yr 1314, L <sub>2</sub> 1906, 9 yr 1435, Gl 3940.
1874		T 7443, Ar 3333, Oe 15154, Y 6620, 9 yr 1437, St 8721.
1880	29259	Pr. Mot. = -0°014 and +0".14.
1885		T 7484, Ar 3347, Oe 15252, Bn, 7 yr 1291, Y 6662, St, 664, 9 yr 1450, St 8769.
1891	29440	W 19, Si, Si, 779, L, 2129, Gl 3980.
1908	29693	W 304, T 7572, R 5362, Ar 3388, 9 yr 1466, B 347.
1912	29752	Pr. Mot. = +0*011 and -0":34.
1935	30044	W 439, R 5427, Si., L, 2083, Y 6814, Gl 4066; Arg. 177 = -0*0292 + 1"·364.
1949	30271	Pr. Mot. in PD = $+ o'' \cdot 48$ .
1965	30483	W 734, T 7762, R 5532, R, Ar 3456, Si, N 7 yr 1894, L <sub>1</sub> 5303.
1968	30535	PM 1860, T 7774, Ar 3462, N 7 vr 1897, L, 5318, Y 6933.
1974	30583	W 797, T 7784, R 5553, R, Ar 3467, 12 yr 1405, N 7 yr 1900, Si <sub>3</sub> 1868, L <sub>5</sub> 2021, Y 6950.
1981	30671	W 850, Si., Sp 6000, L, 2202, Y 6077, Gl 4158.
1984	30694	W 873, Si, Bn, Sp 6007, L, 5371, Y 6988, Gl 4162;
1988	30750	T 7842, Ar 3481, Oe 16123, N 7 yr 1909, Y 7008.
2001	30930	T 7842, Ar 3481, Oe 16123, N 7 yr 1909, Y 7008. W 1008, R 5625, Ar 3500, Si <sub>1</sub> , T <sub>2</sub> , 6 yr 1375, L <sub>1</sub> 2297, Gl 4185.
2013	31068	W 1097, PM 1894, Si, 1524, L, 2057, Y 7090.

No. in Cat.	Lalande.	
2021	31188	W 3, Si <sub>2</sub> . RC 3658, Si <sub>3</sub> 1899, L <sub>6</sub> 2067; Pr. Mot. in NPD = +0"·108 (Tupman, M.N., XLV., p. 482), but it seems doubtful. Possibly LL is merely 10" wrong in PD.
2063	31804	W 376, T 8087, R 5856, Ar 3578, 6 yr 1127, Sp 6245, L <sub>1</sub> 5633.
2082	32255	T 8174, R 5943, Ar 3604, Oe 17323, RC 3730, Y 7349, Gl 4350.
2106	32568	R 6034. Lalande's PD is 5' too small; in H.C. p. 295, the Z D. should evidently be 12° 38' 39" instead of 12° 33' 39". This correction is not given in Bonner Beob. VII.
2124	32762	W 962, L, 844, Gl 4423. Arg. 394, Pr. Mot. = - 0*.0002 + 0".159.
2141	33060	W 1154, T 8347, Ar 3667, 6 yr 1451, L <sub>3</sub> 2546, St <sub>1</sub> 793.
2155	33241	T 8385. Arg. 395, Pr. Mot. = +0":0040 +0":159.
2160	33341	W 22, Ar 3689, N 7 yr 2004, RC, 1726, B 376.
2170	33449	T 8422, Ar 3700, Oe 17871, L6, Y 7698, B 379.
2186	33442	R 6386, Ar 3720, T <sub>2</sub> , Bn, RC <sub>2</sub> 1739, L, 3103, Gl 4511.
2219	34218	W 550, PM 2100, Si <sub>2</sub> , Si <sub>2</sub> 2032, Sp 6781, L <sub>5</sub> 242c.
2232	34418	W 794, R 6597, Bn. Arg. LXIII., but there is no Pr.
2251	34632	W 822, Si, Sp 6884, L2 3468, Gl 4575.
2283	34981	W 1054, R 6738, Si, 1057, Sp 6969, L, 6387.
2306	35284	W 1244, Bn, L <sub>2</sub> 3707, Gl 4643. Arg. LXVII., no Pr. Mot.
2353	35817	W 1923, T 8795. Pr. Mot.?
2355	35851	R 7099. Pr. Mot. = $+ 0^{8} \cdot 005$ (?) and $+ 0'' \cdot 34$ .
2362	35872	W 21, Si <sub>2</sub> , Si <sub>5</sub> 1099, L, 6628, Gl 4716.
2368	35972	W 69, T 7145, Sp 7187, L, 1282, Gl 4724.
2396	36447	W 309, PM 2272, 12 yr 1711, 9 yr 1763, Gl 4759.
2400	36376	T 8880, Ar 4013, Oe 19426, 12 yr 1713, 6 yr 1251, Y 8261.
2414	36532	W 377, Si, Sp 7302, L <sub>2</sub> 4151, Gl 4770. W 511, R 7466, L <sub>4</sub> 1426, Gl 4792.
2430	36781	W 511, R 7466, L, 1426, Gl 4792.
2434	36800	W 534, Si, Bn, L, 4261, Gl 4798.
2504	37686	PM 2359, T 9109, Ar 4171, 7 yr 1604, N 7 yr 2181, 9 yr 1812, PM in NPD = + 0"·44 (Stone).
2513	37766	Slight Pr. Mot. in NPD possible.
2528	37861	T 9150, Ar 4193, Oe 20071, 12 yr 1780, N 7 yr 2206, RC2 1913, L6, Y 8562, St <sub>1</sub> 913, 9 yr 1825, St 10707. W 1300, Si <sub>2</sub> , Si <sub>3</sub> 2206, Sp 7724, L <sub>6</sub> 3055. Arg. 422, Pr.
2543	38100	W 1300, Si <sub>2</sub> , Si <sub>3</sub> 2206, Sp 7724, L <sub>δ</sub> 3055. Arg. 422, Pr. Mot. = -0 <sup>8</sup> ·0213 +0"·374.
2565	38380	W 1910, Bn; Arg. $203 = +0.0549 + 0.0533$ .
2586	38612	W 45, PM 2419, R 8047, Si, Sp 7854, L, 5002, Gl 5022.
2608	38995	W 272, Si, Sp 7953, L, 7429, Gl 5078.
2613	39035	T 9362, R 8192, Ar 4345, Oe 20428, 12 yr 1822, 6 yr 1313, 7 yr 1667, N 7 yr 2280, L, Y 8815, St, 946, 9 yr 1886, St 10888.
2648	39502	W 817, T 9451, Ar 4395, 7 yr 1685, Y 8896, 9 yr 1906.
2652	39591	R 8389, Oe 20625, T <sub>2</sub> , RC 4824, Bn, Gl 5155: Arg. 209, Pr. Mot. = +0°0096 -0″183.
2682	39833	T 9523, R 8496, Ar 4433, Oe 20710, 12 yr 1848, L <sub>6</sub> , Y 8976, St, 974, 9 yr 1920.

No. in Cat.	Lalande.	
2684	39934	Pr. Mot. in PD = + o"17. LL has only one wire and no fraction of second, but there may be a slight positive Pr. Mot. in RA.
2704	40164	W 1057, Si <sub>1</sub> , L <sub>2</sub> 5567, Y 9074, GI 5252.
2729	40405	W 1211, Si <sub>2</sub> , Bn, Sp 8372, L <sub>1</sub> 7904, Gl 5286.
2732	40484	W 1264, T 9683, L, 7927; Pr. Mot. = -0°004 + 0".26.
2741	40604	W 1640, Pr. Mot. = $+0^{8}$ ·18 $-0^{2}$ ·23.
2751	40720	PM 2536, T 9725, Oe 21436, RC 5056, 9 yr 1963, Gl 5313.
2771	40866	T9770, Oe 21123; Arg. 441, Pr. Mot. = -0.10168 + 0.7075.
2798	41287	W 184, R, Si <sub>3</sub> 2388, Sp 8592, L <sub>5</sub> 3575.
2806	41386	W 251, L <sub>4</sub> 2560, Gl 5415; Arg. 446, Pr. Mot. = +0°0006 +0°105.
2835	41700	W 446, L <sub>2</sub> 5969; Pr. Mot. in PD = + o"·30, probably none in RA (LL 1 too small).
2853 2870	41870	W 561, Bn, Si <sub>4</sub> 1996, L <sub>5</sub> 3669, Y 9404, W 707, Ar 4704, Si <sub>2</sub> , T <sub>2</sub> , Bn, Y 9446, Gl 5523.
2873	42156	W 743, T 10048, Ar 4708, Si, 7 yr 1789, Gl 5533, St 11437.
2883	42286	W 856, Pr. Mot. in RA = +08.026.
2888	42295	W 847, Ar 4726, Si, L, 6106, Gl 5557.
2908	42569	W 1023, R 9531, Si <sub>3</sub> 2462, Sp 8875, L <sub>5</sub> 3770.
2919	42687	W 1102, PM 2640, R 9605, Sp 8911, L <sub>3</sub> 4423, Gl 5621.
2933	42843	W 1200, $Si_1$ , $L_2$ 6204, $Gl_5$ 649, $Pr. Mot. = -0^{8} \cdot 020 + 0" \cdot 18.$
2936	42883	W 1278, R 9716, Bn, 7 yr 1830, Arg. 224, Pr. Mot. = -0*0289+0*407.
2939	42898	W 1240, R 9736, Ar 4801, RC 5491, Si, 2059, Sp 8969, L <sub>5</sub> 3814.
2941	42929	W 1259, T 10213, R 9754, Ar 4803, Si <sub>1</sub> , N 7 yr 2507, L <sub>2</sub> 6212, Gl 5661.
2972	43286	W 72, T 10298, R 9908, Ar 4857, N 7 yr 2543, RC <sub>2</sub> 2181, Si <sub>3</sub> 2493, Sp 9061, L <sub>5</sub> 3853, Y 9736, Gl 5724.
2988	43493	W 234, T 10340, R 10027, 7 yr 1861, Y 9778, 9 yr 2090, Gl 5766.
2990	43518	W 205, R 10050, Si <sub>1</sub> , Bn, Si <sub>5</sub> 1259, Sp 9105, L <sub>1</sub> 8756, Gl 5772.
3008	43672	RA's differ os 54 inter se; both observations made in 1878.
3014	43751	Arg. 229, Pr. Mot. = +05.0289 - 05.115.
3035	43974	W 493, R 10301, Si <sub>2</sub> , 6 yr 1469, Bn, Sp 9210, L <sub>3</sub> 4586.
3042	44073	CA 520, T 10450, Ar 4958, 7 yr 1891, RC, 2234, St
3044	44154	R 10396, Ar 4964, Sp 9235, L, 3118.
3064	44459	W 772, Y 9989, Sp 9301, Gl 5922, Pr. Mot. = +0**010
3072	44605	T 10540, Ar 5019, Oe 24635, RC 5826, RC, 2256, Y 10015, Gl 5945.
3074	44568	W 835, T 10539, Ar 5018, Si <sub>4</sub> 2133, Sp 9332, L <sub>8</sub> 3967, Y 10017.
3083	44738	Oe 24756, LL's RA is 1*14 less, but he has only one wire and no fraction of second. In PD there may be a very slight negative Pr. Mot.
3087 3089	44786	W 947, Ar 5037, Si <sub>1</sub> , Sp 9378, L <sub>4</sub> 3221, Gl 5981. W 1076. LL's RA is 6°0 too large; 43 <sup>m</sup> 17° in H.C. should be 43 <sup>m</sup> 11°. This correction is not given in
		Bonner Boob. VII.

No. in Cat.	Lalande.	·
3092	44824	W 988, T 10576, Ar 5050, Si, 12 yr 2058, 7 yr 1918, N 7 yr 2619, RC, 2273, Sp 9393, L, 9026, Y 10068, Gl
3098	44888	5997. W 1042, Ar 5057, T <sub>2</sub> , Bn, Sp 9414, Gl 6010. Arg. LXXXII., but there seems to be no Pr. Mot.
3100	44920	CA 533, W 1064, Si, T <sub>2</sub> , Gl 6019. Pr. Mot. = +0*025 o"17 (CA has +0*029 +0"24). The Pr. Mot. is omitted in BAC.
3103	44946	M 1084, T 10595, R 10771, Ar 5065, Si <sub>1</sub> , N 7 yr 2626, RC <sub>2</sub> 2279, Sp 9436, L <sub>1</sub> 9043, Gl 6026.
3106	44972	W 1099, T 10604, Si2, Sp 9441, L5 4004, Gl 6029.
3111	45028	Y 10126. Pr. Mot. = +05.031 and +0".28.
3122	45199	W 1359, T 10638, L <sub>6</sub> , Arg. 466, Pr. Mot. = +0"0224 -0"032.
3126	45234	W 1269, R 10824, Si <sub>2</sub> , Bn, Si <sub>3</sub> 1323, Sp 9501, L <sub>1</sub> 9093, Gl 6073.
3127	45268	Ar 5098, Oe 25149, T <sub>2</sub> , RC 5961, N 7 yr 2644, Y 10180, Gl 6076.
3128	45265	W 1281, Si <sub>2</sub> , Bn, Si <sub>3</sub> 1324, L <sub>1</sub> 9096, Gl 6079, Arg. 467,   Pr. Mot. = +0*0116+0"026.
3136	45394	W 52, CA 538, Ar 5111, RC 5984, RC, 2299, N 7 yr 2652, Y 10206. Pr. Mot. = -0**020 + 0"*178 according to CA.
3143	45436	W 89, R 10896, Sp 9556, L, 9125, Gl 6106.
3163	45680	W 249, Ar 5144, Si <sub>2</sub> , Sp 9604, Y 10287, Gl 6144, Pr.   Mot. = +0*016+0"·14.
3167		W 280, R 11046, Ar 5154, Si <sub>2</sub> , Bn, Y 10299, Gl 6155.
3197	46085	T 10795, R 11295, Ar 5202, St 12188.
3216	46300	Oe 25838, Bn, Arg. 245, Pr. Mot. = +0*0367 +0"018.
3218	46344	W 701, Pr. Mot. = $+0^{8} \cdot 020 - 0'' \cdot 24$ .
3221	46399	W 692, T 10848, Ar 5232, RC 6152, RC <sub>2</sub> 2345, Si <sub>2</sub> 2661, Sp 9780, 9 yr 2219, Gl 6293, St 12242.
3227	46442	W 710, PM 2843, Si, Bn, Y 10456, Gl 6273.
3233	46532	W 767, Si, Si, 1389, L, 9296, Y 10474, Gl 6284.
3250	46684	W 871, T 10898, R 11646, Ar 5267, 6 yr 1549, N 7 yr 2730, Si <sub>2</sub> 2675, Sp 2675, Sp 9887, Gl 6320, St 12306.
3259	46772	W 914, T 10915, R 11593, Ar 5278, N 7 yr 2736, L, 3514, Y 10527, Gl 6333.
3284	47115	W 1116, T 10979, R 11889, 12 yr 2144, 6 yr 1560, 7 yr 2009, RC <sub>2</sub> 2380, Sp 9962, Y 10610, 9 yr 2251, St 12409.

## Corrections to the Armagh Catalogue for 1840.

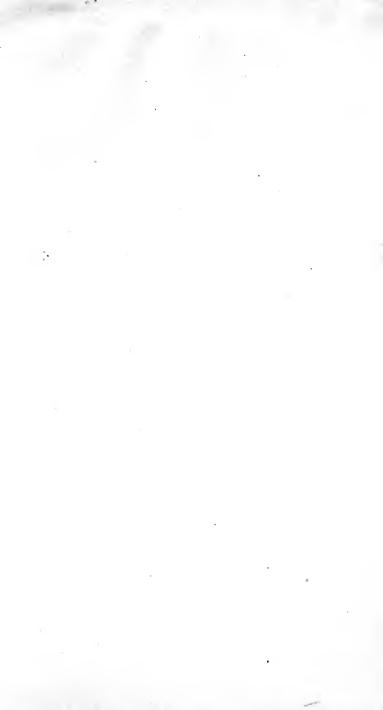
No.		No.	
382 386 485 690 703 784 815 823 851 860 1009 1035 1437 1512 1724 2027 2027 2257 2364 2398 2520 2552 2574	Seconds of PD should be 45" 03.  """ 29" 36. """ 30" 35". """ 10" 47. """ 1" 96. """ 34" 90. """ 44" 06. """ RA "" 1" 43. """ PD "" 30" 58. """ 48" 97.  = LL 8814, PD should be 45" 32'. PD belongs to P. 55 and should be 31° 20' 54" 87. PD should be 31° 30' 20" 53.  = 1507. Seconds of PD should be 9" 19. "" RA "" 31" 86.  = 28 Leonis min. The rough PD is not in the original.  = BW 927, PD should be 62° 57'.  To be struck out.  Seconds of RA should be 21*29. Epoch of PD is 1850 50.  = 2676.	2733 2826 2846 2858 2873 3075 3377 3755 3835 3998 4058 4138 4307 4361 4385 4409 4456 4604 4836 5037 5313	Degrees of PD are 55° (not 52), 1'rec, in RA 2*'932, sec. var0*014.  Seconds of RA should be 24*'26.  PD 24"'06.  =BW 286, RA = 13* 14*" 18*.  Seconds of PD should be 49"'32.  PD should be 39° o'.  Seconds of PD should be 24"'65.  = LL 33792, Baily's RA being wrong.  PD should be 107° 53' 27"'22 (see Astr. Nachr. No. 1924).  = 3831.  = 3909.  Seconds of PD should be 27"'63.  "" 16"'17.  PD should be 41° 2' (DM 49°, 3069).  = BW 116, PD 86° 59'.  = BW 400, RA 20* 15** 44*'95, PD 80° 12'.  = Coe 20647, PD 41° 29'.  = Oe 20647, PD 41° 29'.  = Oe 20909, PD 330 8'.  Seconds of PD should be 4"'61.  "" 59"'84.  = BW 947, PD 80° 37'5.  Seconds of PD should be 57"'98.

## ERRATA IN THE PRESENT CATALOGUE.

No.	
677 1324 1579 1783 2044 2116 2544 2836	Seconds of RA, for 5°14 read 4°14. In column "Obs." (p. 60) dele the figure 2. is = T 6270. Epoch of PD should be 79°63. Seconds of RA, for 49°15 read 48°58. Seconds of NPD, for 12" read 2"7. Seconds of RA, for 59°87 read 59°97. Seconds of RA, for 37°89 read 38°09.

In the column "Authorities," the words "See Notes" should be added at the following Numbers:—425, 788, 985, 995 1010, 1294, 1949, 3064.

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